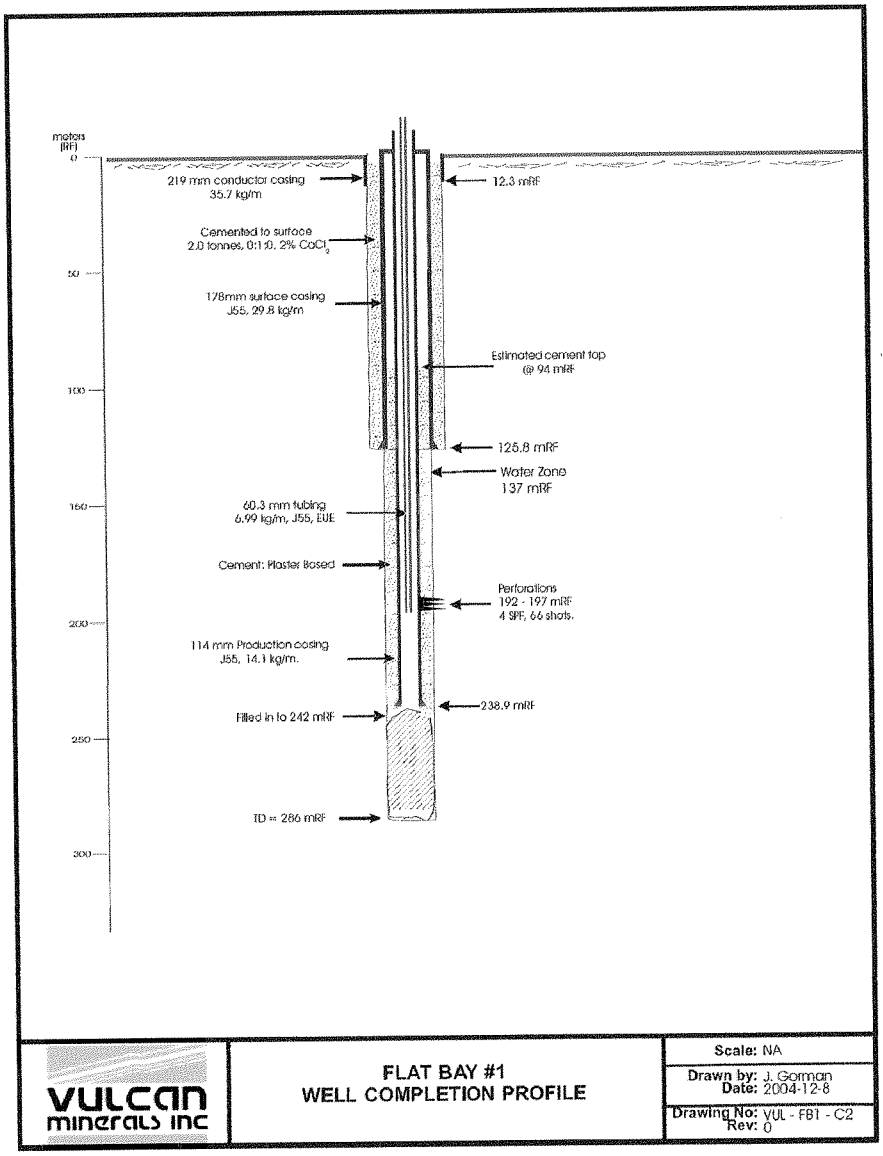
Release Date: Aug. 20th, 2004
Doc-671
PRD-947/15

VULCAN minerals inc

COMPLETION REPORT



VULCAN minerals inc	FLAT BAY #1 WELL COMPLETION PROFILE	Scale: NA Drawn by: J. Gorman Date: 2004-12-8 Drawing No: VUL - FB1 - C2 Rev: 0

COMPLETION REPORT

Revision:	**Version 2**
Operating Company:	**Vulcan Minerals Inc**
Well Name:	**Flat Bay #1**
Field:	**Flat Bay**
Location:	**St. Georges Bay,** **Western Newfoundland, Canada**

Prepared by: Karla Smith, Vulcan Minerals Joe Gorman, P.Eng, Namrog Services Date:	Reviewed by: Patrick Laracy, Vulcan Minerals Date:

Table of Contents

List of Appendices

1 Overview

Completion and production testing operations on the Flat Bay #1 well commenced on Feb 23rd, 2004 and were completed on June 21st, 2004. The well was drilled in 1999 with a Cable Tool Rig and had been dormant since then. The well had surface casing set at 126-mRF, above the target zone, with the balance of the well to 286-mRF remaining uncased.

In order to complete the well for production operations, a program to run casing, stimulate and evaluate was required.

2 Summary of Events

The sequence of events for operations carried out on the well were as follows:

- Utilizing a mining rig to re-enter the well
- Running a completion log
- Installing 114 mm casing
- Cementing same
- Running 60.3 mm tubing
- Perforating the target zone
- Conducting a high-pressure stimulation operation, consisting of a gelled diesel oil fracturing treatment
- Swab testing the well
- Installing a bottom hole pump and rods
- Installation of a pumpjack, flow lines and surface tankage
- Pump testing the well
- Removal and installation of a replacement pump
- Continued testing

3 Well Configuration

The well was drilled in 1999 by Eastern Oilfield Services to a TD of 262.0-mRF. The 177-mm Casing was set and cemented, during drilling, above the target zone at 125.9 MRF. The remainder of the well was left uncased.

Appendix II contains a sketch of the original well configuration.

4 Operations Summaries

A summary of the major operations conducted on the well during the subject period is as follows.

Appendices XIX and XX containing the daily operations reports.

4.1 Utilizing a Mining Rig to Re-enter the Well

Period: Feb 22 - Mar 5 2003
These operations consisted initially of preparing the site and access road for the well operations. This included constructing berms drains and installing a culvert at the access point.

The drilling rig was installed over the well using a wooden substructure. This rig is operated by Petrol Drilling Ltd. of Springdale Newfoundland. An annular diverter was also installed and function tested.

Oil was bled off the top of the well. The well was then circulated to brine. A run was made to bottom to confirm the condition of the well and the level of the rubble anticipated at the bottom of the well. The driller could not advanced past 242 meters due to rubble filling the bottom of the hole over the 4 years since the well was drilled. The TD of the well at the time of the original logging operations was 261.5 mRF (ZDL-CNL-GR-Cal log dated 11 - Sept -1999).

Operations were conducted in accordance with a Completion Program approved by the department of Mines and Energy and had several Conditions of Approval.

Appendices III & IV contain the Completion Program and the M&E Approval respectively.

4.2 Installation of 114 mm Production Casing

Period: March 6 - Mar 7 2003

Production casing (140mm, 14.14 kg/m., J55) was run to 237.91 meters. Centralizers were not used due to an inability to pass the centralizers through Petro's diverter. Casing connections were torqued as per specifications.

4.3 Cementing of the Production Casing

Period: March 9th, 2003

Several mix designs were considered and evaluated by Schlumberger. A plaster based cement job was selected and initiated by Schlumberger. After 1-m3 was pumped, displacement problems were encountered. The cement set up in the cementing unit, flow lines and in the well shortly thereafter. A total of 1.2-m3 of cement was pumped.

A job failure analysis conducted by Schlumberger concluded that the pumping operation failed due to chunks of plaster becoming lodged in the valve seats of the pumping unit. Schlumberger also concluded that there were quality control issues with the cementing operation including:

- Improper blending of the materials at Schlumberger's Dartmouth depot.

- Improper calculation and reporting of additives and blend components when tests were conducted for design purposes prior to the job.
- Insufficient fluffing of materials on site.

The above may have also contributed to the rapid cement set up time.

Attach V - Proposed Cementing program
Attach VI - Schlumberger Job Report

4.4 Drill out of Cement and Pressure Testing

Period: March 9th - 13th, 2004

The cement in the well bore was drilled (cored out) by Petro's rig.

The top of cement was encountered at 108-mRF in the well. Vulcan's estimate of cement top in the annulus, based on this and the amount pumped was 114 mRF. This is approximately 12-meters above the 178-mm casing set point at 126-mRF. See Appendix VII for calculation details.

The annulus was successfully pressure tested to 700-psig (4.8-mPa) for 309-minutes. The cement was cored out to 230-mRF.

Appendix VIII contains the casing pressure test record.

4.5 Running Tubing and Perforating the Casing

Period: Mar 14th - 15th, 2004

Tubing (63-mm 6.99-kg/m J55 EUE) was run in the well, torqued as per specifications, and landed at 182.9-mRF. The tubing and surface valves were pressure tested to 2000-psig (13.8-Mpa) for 30-minutes.

A completion log (GR-CCL) was run and correlated to the ZDL-CNL-GR-Cal log dated 11-Sept-1999. The well was swabbed down to 70-mRF prior to running the gun The interval 192 -197 mRF was perforated on the second attempt with a 43-mm Schlumberger Enerjet III thru-tubing gun with 0 degree phasing at 13 shots per meter. Total 66 shots. No pressure response.

Attach A - Completion & Perf Log dated 15-Mar-2004

4.6 Gelled Diesel Fracturing Operations

Period: March 16th - 26th 2004

The first frac attempt was made on March 16th. The well was acidized with 500-litres of 15% HCL and a feed rate of 0.9-m^3 per minute at 7200-kPa was established. Preparations were then made to gel the diesel fuel/sand mixture in the batch tanks. However, when the breaker was added, premature drop out of the sand was observed. Schlumberger was unsuccessful in obtaining a proper sand suspension regime in the batch tanks. The job was terminated at that point since there was insufficient diesel and sand on site for the mixing of a new batch.

A post job analysis, conducted after testing of the sand, diesel fuel and additives indicated that the desired suspension properties were not achieved due to high moisture content in the sand. This sand had been obtained directly by Vulcan from Schlumberger's supplier in Ontario. Preparations for a second frac were made utilizing sand shipped from Schlumberger's stock in Alberta.

On March 26th, a second frac attempt was successful. The frac consisted of pumping down the tubing with of a 7.2-m^3 diesel pad, diesel slurry containing 4.1-m^3 of diesel and 3.7-tonnes of sand followed by a 0.4 m^3 diesel flush at a rate of 0.97-m^3/min. Sand concentrations were staged and ranged from 600 to 1200-kg/m^3. Surface pumping pressures averaged 7500-Kpa with a high of 8700-kPa. All pressure and flow measurements indicated a normal fracturing operation.

The annular ISIP was 5113-kPa. The 15-minute SIP was 4166-kPa. When the recording equipment was rigged out, 30-minutes after the cessation of pumping, the SIP was 2935-kPa.

The frac fluid left to recover was 11.7-m^3 diesel.

Appendix IX - Schlumberger prosed frac program
Appendix XI - Schlumberger job report (first attempt)
Appendix XII - Schlumberger job report (second attempt)

4.7 Flowback and Swabbing of the Well

Period: March 27th - March 30th, 2004

The well was shut in overnight to allow the gel to break and the frac to heal. The 2895-kPa pressures on the tubing and casing the next morning indicated that there was zero or minimal pressure leak off. The well was flowed for a very short period of time with 0.7-m^3 returns. Gel and sand were evident and it was decided to leave the well shut in for one more day to allow for complete breaking of the Gel.

The next morning the tubing pressure was 2585-kPa and the casing (annular) pressure was 2895-kPa, identical to the pressures at the end of operations the previous day. The well was flowed to the tank with 2.2-m^3 being recovered before stopping. Swabbing, utilizing the Petro rig and oilfield swabbing equipment was conducted throughout the remainder of the day. Swabs were pulled until the tubing was dry with approximately 30-litres of fluid being obtained. This was followed by a 30-minute interval and swabbing resumed again. This sequence was repeated until the conclusion of operations at the end of the day. Total fluid recovered was 4.3-m^3 for the day.

The tubing was lowered to the bottom of the perforations and circulation was established to ensure that the perforations were not blocked by sand in the casing. Swabbing resumed on a daily basis through March 30th. At this point less than 10-litres of fluid was being obtained after one hour of swabbing. Total fluid recovery at that point was 7.3-m^3.

The Petro drilling rig was released March 30th, 2004 at 12:00 and the site secured.

Appendix XIII - Tubing Tally Sheet dated Mar 29th, 2004.

4.8 Installation of a Pump, Pumpjack and Tank

Period: June 11th – August 19th, 2004

In order to conduct a proper production test on the well, it was decided to install a bottom hole pump, pumpjack and storage facilities. The pumping equipment was sized to accommodate a rate of 15-bbls (2.4-m^3) of fluid per day based on indications from the swab testing of the well.

The following equipment was install at the site:

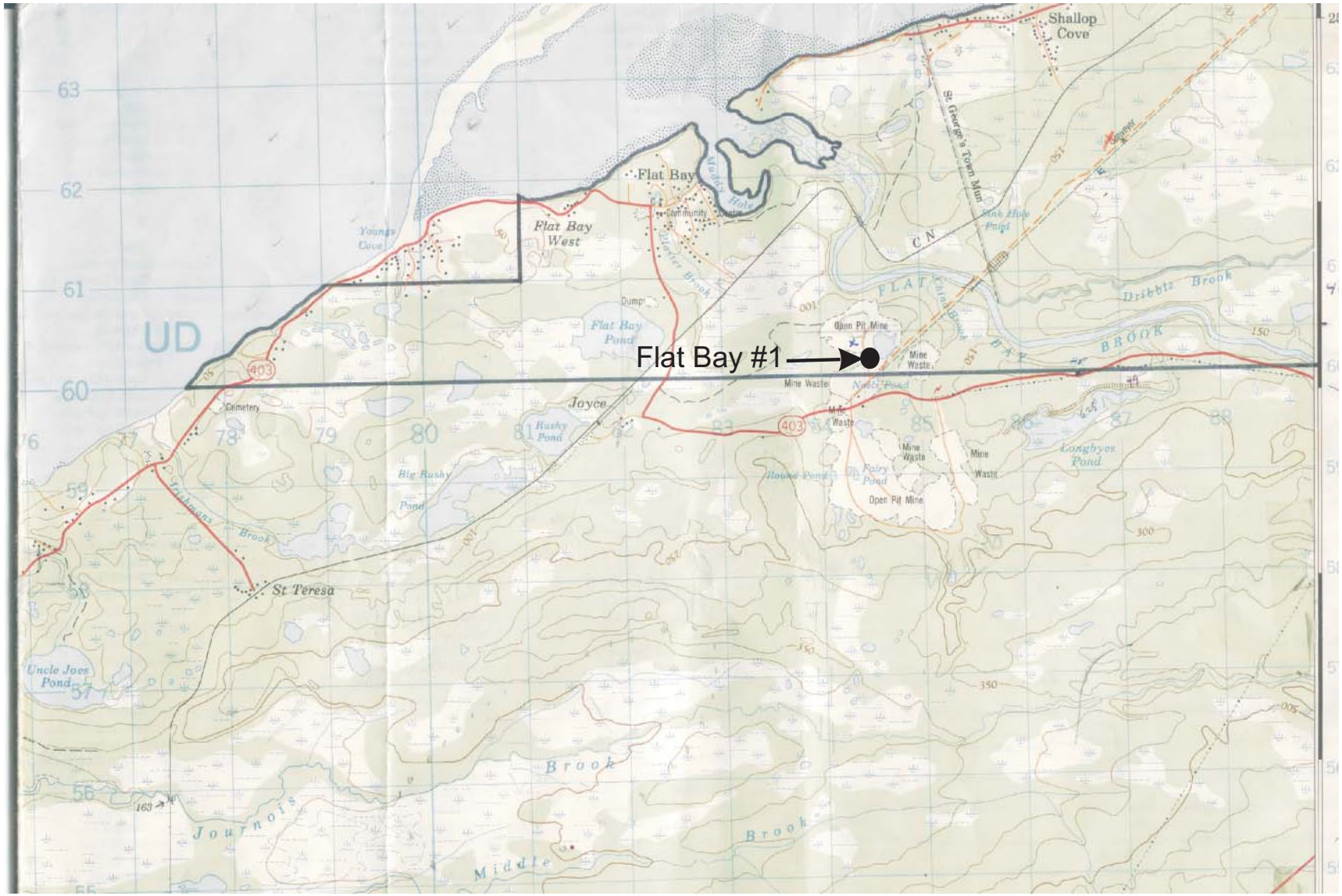
- Alten 25R-2 pumpjack and 5-HP 1150-rpm electric motor
- Sucker rods and an in-tubing plunger type oilfield pump
- 210-bbl standard API style tank
- Standard piping and regulators normally associated with an oilfield pumping operation.
- Chemical injection pump for possible dewaxing operations.

Pumping of the well commenced on June 15th, 2004. Fluid levels in storage tank and fluid volumes pumped down the annulus were recorded on a daily basis. Low levels of fluid production were experienced and as a result the well would pump off (i.e. pump total fluid column in the annulus above the pump) and shut down due to sand plugging of the pump. After replacing the in-tubing plunger type oilfield pump at the end of July 2004, a production schedule was made to pump the well intermittently throughout the day. Due to continued sand plugging problems, the testing activities were suspended and well shut in on August 19th, 2004. Total calculated fluid produced was 4.8-m^3 of fluid that comprised of approximately 90% water and 10% oil.

Appendix XIII – Tubing Tally Sheet dated Mar 29th, 2004
Appendix XIV – Production Testing Calculations June 15th, 2004 to August 16th, 2004
Appendix XV – Well Site Layout June 15th, 2004
Appendix XVI – Current Well Profile April 2nd, 2004
Appendix XVII – Well Equipment June 15th, 2004

Appendix - I

Well Location Map



VULCAN MINERALS INC

Flat Bay #1
WELL LOCATION MAP

Scale:	N.A.
Drawn by:	J.E.G.
Date:	2003-11-26
Drawing No:	FB 1 - PERS 3
Rev:	

Appendix - II

Original Well Configuration

3.19

Well Schematic

Flat Bay #1

Figure 4

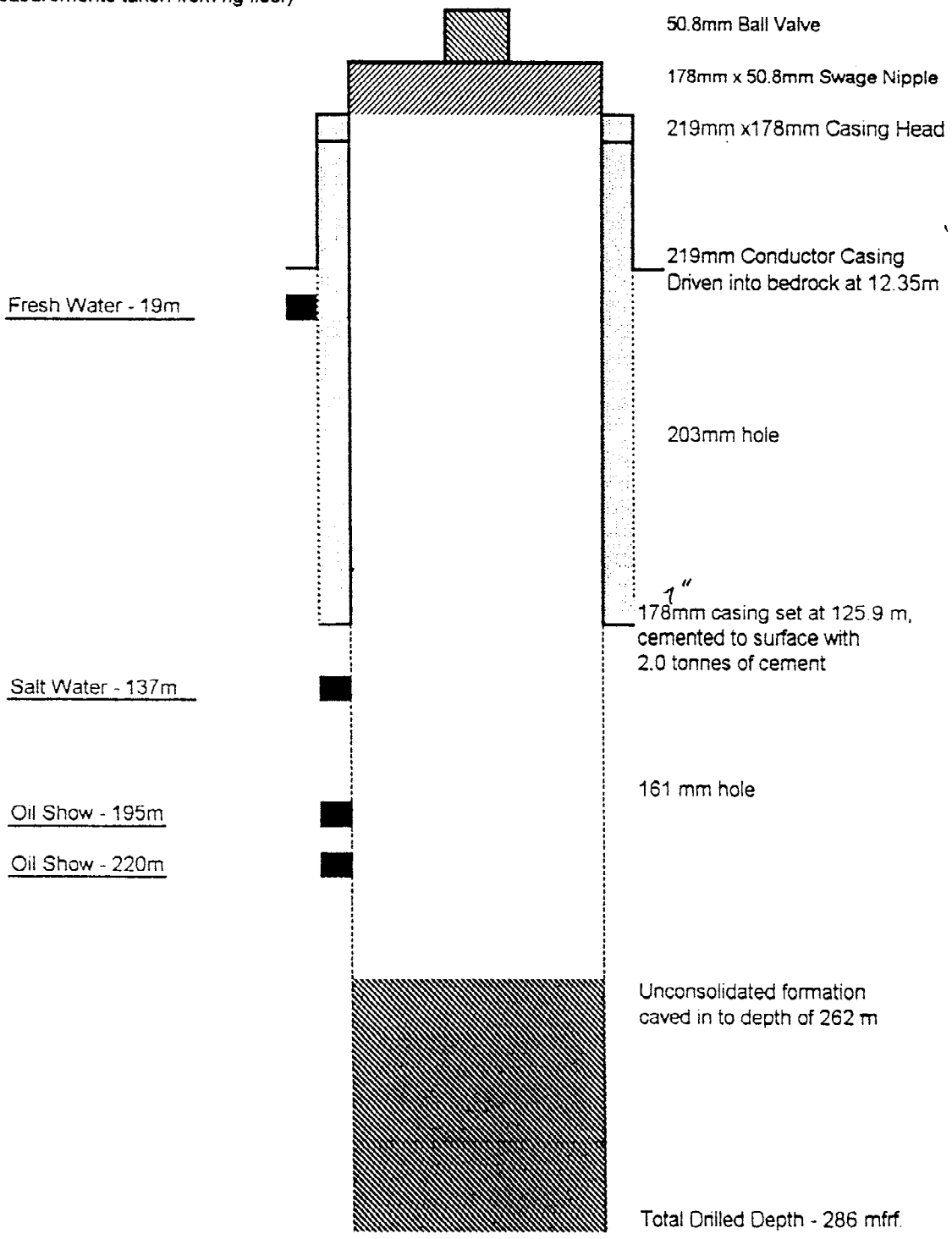
5360237.971 384435.373

Location: UTM ~~5360261.54~~ North, ~~38441.98~~ East

Surface Elevation: 47.0m

Rig Floor Elevation: 48.3m

(All measurements taken from rig floor)



Appendix - III

Well Completion Program

Feb 21st, 2004

Flat Bay #1
Completion and Stimulation Program

Overview

The well sits capped, cased with a 178 mm cemented casing and has a barefoot completion. This program cases the well to PBTD and cements a 114 mm production casing. Tubing (60 mm) is run to a point above the highest prospective productive zone. The well is then perforated, fraced with gelled diesel and flowed back.

Steps are as follows:

1. Prepare Site and Kill Well.
2. Install and Cement 114 mm casing.
3. Pressure test, Install tubing, swab and perforate.
4. Acidize and Frac.
5. Flow Back Well, Recover Frac Fluids and Evaluate Performance.

Phase 1 - Site and Well Preparation

1. Lay out site boundary. Conduct any leveling required. Stake out equipment locations.
2. Construct berm and access way.
3. Prepare area around well for rig. Dig and line cellar if required . Construct ramp if required.
4. Ensure that the following is on site:
    - all fittings necessary to connect line for flow back to rig tanks.
    - all tankage required for the proposed operations.
5. Set up rig over well. Current height restriction is 1.22 metres from the top of well equipment to ground level. Rig is Petro Drilling's Longyear Hydro 50 with a 287 kN maximum crown block load. (29,200 Kg). Main Hoist rating = 122.3 kN. Estimated pipe weights are as follows:
    - Casing: 262 m x 14.14 kg/m = 3,700 kg. (36.2 kN)
    - Tubing: 262 m x 6.99 kg/n = 1,831 kg. (18.0 kN)
    - See attached spec sheet for rig.
6. Hook up the following to the 50 mm ball valve (V1).
    - 1 nipple.
    - 1 tee c/w 0-100 psi pressure gauge.
    - 1 - 50 mm valve.(V2)
    - line to rig tank.
7. Close V2. Open V1 and record pressure.
8. Open V2 and flow to rig tank until spent. Shut in for 1 hour. Record pressure.
9. If required flow to rig tank until spent. If well does not flow, go to Phase 2.
10. Monitor additional flows for ½ hour. If no additional flows, go to Phase 2. Otherwise leave open until no flows observed for 1 hour.
11. Go to Phase 2.

Phase 2 - Install Casing and Cement

1. If necessary, construct and install a drip pan around casing connected to tank flow line.
2. Ensure fittings are available and the proper size.
3. Ensure that several short joints are available.
4. Remove 178 x 51 mm swage nipple. Place to one side protect threads. Keep ready for reuse.
5. Install 178 mm x 114 mm. low profile casing head c/w 50 mm side ports, nipples and 50 mm full operning valves. Casing head rating is 10.3 mPa. (See attached Insert casing head details)
6. Install 179 mm diverter.
7. Hook up return line to casing head. Close valve on other port.
8. Run in and tag bottom with drill stringor on line with guage ring. Strap in or pre-measure drill string lengths.

   Note: Original TD at 286 mRF. However rubble estimated to be at 262 m. RF or above.
9. Use casing tally sheet prior to running casing and determine joints to run. Avoid having connection across the planned perforating interval. Also juggle lengths to ensure that top joint ends up a reasonable height off ground.
10. Run 114 mm casing in hole at controlled rate.
11. Casing to be handled using appropriate elevators and slips or approved equivalents. Casing makeup torque is as follows:

API Recommended Settings	ft-lb	N.m
Minimum	760	1030
Optimum	1010	1370
Maximum	1260	1710

Recommended torque settings to be achieved through the use of a calibrated torque wrench or using the rig swivel hydraulics if appropriate set points can be assured and over-torqueing is prevented.

12. Casing configuration, from bottom up, as follows:
    - casing shoe
    - one joint of casing
    - float collar
    - slim line centralizers on every 3rd casing length. Also place centralizers directly above and below planned perforating interval. Do not place centralizers in the ranges 191m to 198 m RF and 218 to 224 mRF.

13. Monitor fluid level and returns while running casing. Ensure that no fluid flows out of well except through the 50 mm returns line.
14. Set casing 1 meter off bottom, adjust top joint length to land in casing head. Do not tag bottom with shoe. If this happens, confirm circulation prior to landing casing wellhead.
15. Install valve and piping for cementing operation.
16. Conduct cementing operations as per Sclumberger program. Pump 3.0 m^3 pre-flush. Maximum surface treating pressure = 10.3 mPa. Calculated cement volume = 3.07 m^3. Excess = 30%. (to be verified in field) Drop plug. Ensure returns to surface with good quality cement. Chase with 1.95 m^3 water (underflush by 0.25 m^3). Monitor surface returns. Bump plug. Close valve.

    All final volume calculations to be done on site prior to cementing operation.
17. WOC a minimum of 12 hours before re-entering the well.
18. Tag top of cement. Drill out if required to 230 mRF.

Phase 3 - Pressure Test, Install Tubing and Perforate

1. Remove diverter. Install 14 Mpa tubing head.
2. Pressure test casing and tubing head to 14 Mpa. (Wellhead WP = 14 Mpa minimum. Casing burst rating = 30.2 Mpa)
3. Run in hole with 60.3 mm, J-55, 6.99 Kg/m, EUE tubing with pump seating nipple above bottom joint. (Tubing burst pressure rating =53 Mpa).
3. Tubing to be handled using appropriate elevators as slips or approved equivalents. Tubing makeup torque is as follows:

API Recommended Settings	ft-lb	N.m
Minimum	970	1320
Optimum	1290	1750
Maximum	1610	2180

Recommended torque settings to be achieved through the use of a calibrated torque wrench or using the rig swivel hydraulics if appropriate set points can be assured and over-torqueing is prevented.

4. Land tubing at approximately 180 meters. Install remainder of tubing head assembly, nipple and 50mm. valve.
5. Rig in Schlumberger wireline unit with lubricator.
6. Run temperature profile if conditions are conducive to same.
7. Run GR-CCL log from PBTD to 180 meters. Correlate to Baker Atlas ZDL-CNL-GR log dated 11-Sep-1999.
8. Swab well down to 75 mRF.
9. Run in with 43 mm. Schlumberger Enerjet III through tubing gun and perforate interval 192.0 - 197.0 mRF, 4 SPF, total 66 shots. Monitor pressure response.
10. Rig out Schlumberger.

Phase 4 - Acidize and Frac

1. Move rig off well and place on standby in case of sand off.
2. Finalize frac and other tank placements. Install necessary piping. Ensure equipment spacing is as per Schlumberger requirements.
3. Fill frac tanks with)15 cubic meters + tank bottoms) of diesel fuel from North Atlantic Petroleums.
4. Ensure adequate fire protection on site.
5. Acidize and conduct down-tubing frac with gelled diesel and 4,000 kg of 20/40 sand as per attached Schlumberger frac program dated January 6, 2004.
6. Shut well in. Record ISIP. Record surface pressures until frac heals.
7. Leave well shut in overnight.

Phase 5 - Flow Back Well, Recover Frac Fluids and Evaluate Performance

1. Rig in necessary pipe and fitting. Attempt to flow well back to rig tank on a controlled basis until frac fluids have been recovered. If well does not flow, move rig back on and attempt to swab well in.
2. Continue flowing well to rig tank . Estimated maximum is 3 days. Record water and oil volumes. Determine water salinity and oil gravity. Collect oil samples for analysis.
3. Evaluate short term well performance. This information will be utilized in designing a long term well test.
4. Shut well in. Remove unnecessary equipment. Clean up site. Leave berm in place. Secure site.
5. No further flow testing to be conducted without approval of the test program by NDME.

Appendix - IV

ARW Approval
Feb 25th, 2004

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

Department of Mines and Energy

AUTHORITY TO RE-ENTER A WELL

RE-ENTRY APPLICATION

Pursuant to sections 8 and 9 of the *Petroleum and Natural Gas Act*[1] and in compliance with section 24(1)(b) of the *Petroleum Drilling Regulations*[2], **Vulcan Minerals Inc.**, as operator, hereby applies for Authority to Re-enter the Well known as **Flat Bay #1** using the equipment and procedures described in the well program dated **Feb 3rd**, **2004**.

Permit, Licence or Lease to which this Program applies: **96-105**

Area: **Flay Bay** Field/Pool:	**CO-ORDINATES**	**UTM (NAD 27)**
	Long: Lat:	Northing: **5 360 237.971** Easting: **384 435.373**
Rig: Rig Type: **Longyear 50** Drilling/Servicing Contractor: **Petro Drilling Ltd.** Completion or Workover Fluid: **Water and Diesel**	**ELEVATION**	**DEPTH**
	~~RT/KB~~/RF: **48.3 m** G.L.: **47.0 m**	T.D.: **286 mRF** TVD: **289 mRF**

CASING AND TUBULAR SUMMARY

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m)
114	14.1	J55	261
60.3	6.99	J55	170

Other Downhole Equipment: (Attach a schematic) **No other major downhole equipment. See attached schematic.**

ESTIMATES		PRESSURES (kPa)	TARGET INTERVAL(s): (m)
Re-entry Date: **Feb 2004** Days on Location: **12**	Cost: **approx $175,000**	~~RHSIP (@MPP) = 3,370 (est max)~~ ~~SITHP = 0 (est)~~ STP = **14,000 (frac)**	**192.0 - 197.0 mRF**

RE-ENTRY/TESTING SUMMARY

Program Overview: **As per program dated Feb 3rd, 2004. Kill well, Run and cement production casing, run tubing, frac, flow back, evaluate.**

Suspension or Abandonments: (Provide details and attach schematic)

The undersigned operator's Representative hereby declares that, to the best of the Representative's knowledge, the information contained herein and in the attached detailed program is true, accurate and complete.

Signed: _____ Operator's Representative

Date: Feb. 09/04.

AUTHORIZATION

Whereas the Minister of Mines and Energy has jurisdiction under the *Petroleum Drilling Regulations*, ("the Regulations").

In accordance with section 32 of the Regulations, the operator named in the Application is authorized to undertake the proposed well program described above subject to the following conditions:

1. This Authorization shall be prominently displayed at the well site at all times during which operations are being conducted;
2. Copies of all logs and well test data shall be submitted to the director by the operator promptly after their acquisition;
3. Evidence of financial responsibility in a form satisfactory to the Director, shall be provided prior to commencing re-entry operations.
4. This ARW is for re-entry operations of the well originally approved under Drilling Program Approval No. 99-116-01
5. No change in the well program hereby approved may be made unless it is first approved by the director in writing;
6. This ARW approval shall, unless otherwise extended or terminated, expire upon the 30th day of June, 2004.
7. This Authorization is conditional on the operator commencing operations within 120 days of the effective Authorization date; and
8. The operator shall comply with such other conditions as are appended to this Authorization.

Signed: _____ Director

Effective Date: February 27th, 2004

Authority to Re-enter a Well No. 2004-116-01-01

[1] *R.S.N. 1990, c. P-10*

[2] *CNR 1150/96*

Appendix - V

Proposed Cementing Program
Feb 21st, 2004

Schlumberger

CEMENTING PROPOSAL

for

VULCAN MINERALS INC
Flat Bay #1

Plaster System

Attention: Joe Gorman, Pat Laracy

Lara Burgess
Field Service Manager
Dartmouth, Nova Scotia
Off: 902.481.6426
Cell: 902.478.4451

Service District:
Dartmouth, Nova Scotia

Feb 21, 2003

Schlumberger

114 mm CASING

Well Data:

Hole Size:	170 mm Equivalent OH Diameter
Casing Size:	114 mm / 4½"
Depth:	280 metres
Previous Casing:	177.8 mm / 7" @ 126 m
B.H.S.T:	**11°C**
B.H.C.T:	**25°C**
Casing Volume Factor:	±0.00811 m^3/metre
OH Annular Volume Factor:	0.0125 m^3/metre gauge
Csg-Csg Annular Volume Factor:	±0.00918 m^3/metre

Preflush/Spacer: Fresh water ahead

Cement Slurry: 60:40 :: D053:Class G
+ 8.5 L/tonne D145, Dispersant
+ 1.0% BWOC D013, Retarder
+ 20 L/tonne D600g, Fluid Loss Additive
+ 0342 m^3/tonne Fresh Water

Density:	1900 kg/m^3		
Yield:	0.73 m^3/tonne		
Thickening Time:	4:00		
Slurry Volume Required:	(154 m X 0.0125 m^3/m) =		1.93 m^3
	(126 m X 0.00918 m^3/m) =		1.16 m^3
	(10 m X 0.00811 m^3/m) =		0.08 m^3
	Total =	3.2 m^3	
Tonnage Required:	(3.2 m^3 ÷ 0.73 m^3/tonne) =		4.4 MT

Feb 21, 2003

Appendix - VI

Schlumberger Cementing Report & Data

March 9th, 2004

Schlumberger

Service Order

2005-Jan-20

Customer	Person Taking Call	Dowell Location	OrderDate	Job Number
Vulcan Minerals Inc	Burgess, Lara	Dartmouth, NS	2004-Mar-07	**2203840303**

Well Name and Number	Legal Location	Field	County	State/Province
Flat Bay 1				Newfoundland

Well Master:	API / UWI:
0630581738	

Rig Name	Well Age	Sales Engineer	Job Type
Petro Drilling Co.	New	Burgess, Lara	Cem Prod Casing

Time Well Ready:	Deviation	Bit Size	Well MD	Well TVD	BHP	BHST	BHCT
3/8/2004 10:00 AM	°	171 mm	286 m	286 m	kPa	11 °C	25 °C

Treat Down	Packer Type	Packer Depth	WellHead Connection	HHP on Location	Max AllowedPressure	Max Allowed AnnPressure
Casing	None	m	114mm head		10300	

Casing

Depth, m	Size, mm	Weight, kg/m	Grade	Thread
239.66	114	14.15	J55	8rd

Tubing

Depth,	Size, mm	Weight, kg/m	Grade	Thread

Perforated Intervals

Top, m	Bottom, m	spm	No. of Shots	Total Interval
				m
				Diameter
				mm

Services Instructions:

Supply Men equipment and materials to cement 114mm surface casing @ 239.66m with 4.5 T of a Plaster system

Extra Equipment:

Expected On Location: 3/8/2004 10:00 AM **Ready To Pump:** 3/9/2004 10:00 AM

Contact	Voice	Mobile	FAX	Notes
Ed Weiterman	709 689 0075			

Notes:

Directions:

Approx 147 km from Port aux Basque turn Left on to road for Flat Bay. Drive 7 km then turn Right onto lease road.

Other Notes:

Comments:

Fluid Systems:

Plaster

2700 kg D053 + 1780 kg D907 + 20 kg D013 + 20 litres/tonne D600 + 8.5 litres/tonne D145A

Density:	1900	kg/m³	*Thickening Time:*	3:45	
Yield:	0.73	ft³/sk			
H2O Mix:	0.342	m³/ton			
H2O:	1.539	m³	*Eq. Sack Weight:*	0	lb
			Total Blend:	4.5	sacks

Dowell Code	Conc/ Amount		Total Quantity
D145A	8.5	litres/tonne	38.25
D600	20	litres/tonne	90
D013	20	kg	20
D907	1780	kg	1780
D053	2700	kg	2700

Schlumberger

Cementing Service Report

Customer	Job Number
Vulcan Minerals Inc	2203840303

Well	Location (legal)	Schlumberger Location	Job Start
Flat Bay 1		Dartmouth, NS	2004-Mar-09

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
		°	171 mm	286 m	286 m

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
	Newfoundland	kPa	11 °C	25 °C	kPa/m

Well Master: 0630581738	API / UWI:

Rig Name	Drilled For	Service Via
Petro Drilling Co.	Oil	Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Vis
None	1034 kg/m³	cp

Service Line	Job Type
Cementing	Cem Prod Casing

Max. Allowed Tubing Pressure	Max. Allowed Ann. Pressure	WellHead Connection
10300 kPa	kPa	114mm head

Service Instructions

Supply Men equipment and materials to cement 114mm surface casing @ 239.66m with 4.5 T of a Plaster system

Casing/Liner

Depth, m	Size, mm	Weight, kg/m	Grade	Thread
239.66	114	14.15	J55	8rd

Tubing/Drill Pipe

Depth,	Size, mm	Weight, kg/m	Grade	Thread

Perforations/Open Hole

Top, m	Bottom, m	spm	No. of Shots	Total Interval
				m
				Diameter
				mm

Treat Down	Displacement	Packer Type	Packer Depth
Casing	2 m³	None	m

Tubing Vol.	Casing Vol.	Annular Vol.	OpenHole Vol
m³	2.03 m³	2.8 m³	2.6 m³

Casing/Tubing Secured ☑	1 Hole Volume Circulated prior to Cementing ☑

Lift Pressure: 3200 kPa	Pipe Rotated ☐	Pipe Reciprocated ☐

No. Centralizers: 6	Top Plugs: 1	Bottom Plugs: 0

Cement Head Type: Single

Job Scheduled For:	Arrived on Location:	Leave Location:
3/8/2004 10:00	2004-Mar-09 5:45	2004-Mar-09 18:30

Casing Tools

Shoe Type: None	Shoe Depth: m	Stage Tool Type:	Stage Tool Depth: m	Collar Type:	Collar Depth: m

Squeeze Job

Squeeze Type	Tool Type:	Tool Depth: m	Tail Pipe Size: m	Tail Pipe Depth: m	Sqz Total Vol: m³

Date	Time (24 hr clock)					Message

Post Job Summary

Average Pump Rates, m³/m

Slurry	N2	Mud	Maximum Rate
0.4			0.6

Volume of Fluid Injected, m³

Total Slurry	Mud	Spacer	N2
2.7	0	3	

Treating Pressure Summary, kPa

Maximum	Final	Average	Bump Plug to	Breakdown
800		200		

Breakdown Fluid

Volume	Density
m³	1033 kg/m³

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp
%	3.2 m³	1 m³	9 °C

☐ Cement Circulated to Surface? Volume m³

☐ Washed Thru Perfs To m

Customer or Authorized Representative	Schlumberger Supervisor
Weiterman, Ed	Law, Kevin

☐ CirculationLost ☑ Job Completed

Schlumberger

Job Date: 03-09-2004

Customer: Vulcan
District: Dartmouth, NS
Representative: Ed Weiterman
DS Supervisor: Kevin Law
Well: Flatbay 1 - Cement Prod Casing

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:09:2004:10:18:38	1603	0.00	305.71	0.0
03:09:2004:10:19:08	0	0.00	305.71	0.0
03:09:2004:10:19:10	Safety Meeting			
03:09:2004:10:19:10	0	0.00	304.98	0.0
03:09:2004:10:19:38	0	0.00	305.71	0.0
03:09:2004:10:19:57	Circulate Unit			
03:09:2004:10:19:57	0	0.00	304.98	0.0
03:09:2004:10:20:08	0	0.00	304.98	0.0
03:09:2004:10:20:38	0	0.00	305.71	0.0
03:09:2004:10:21:08	0	0.00	304.98	0.0
03:09:2004:10:21:38	0	0.00	305.71	0.0
03:09:2004:10:22:08	0	0.00	304.98	0.0
03:09:2004:10:22:38	0	0.00	305.71	0.0
03:09:2004:10:23:08	32	0.00	830.83	0.0
03:09:2004:10:23:38	316	0.00	1026.83	0.0
03:09:2004:10:24:08	32	0.00	1026.10	0.0
03:09:2004:10:24:38	158	0.31	1025.37	0.1
03:09:2004:10:25:08	189	0.39	1025.37	0.3
03:09:2004:10:25:38	0	0.00	1025.37	0.4
03:09:2004:10:26:08	0	0.00	1025.37	0.4
03:09:2004:10:26:38	0	0.00	1025.37	0.0
03:09:2004:10:26:43	Water Ahead			
03:09:2004:10:26:43	0	0.00	1025.37	0.0
03:09:2004:10:27:08	0	0.00	1025.37	0.0
03:09:2004:10:27:38	316	0.19	1025.37	0.1
03:09:2004:10:28:08	316	0.19	1025.37	0.2
03:09:2004:10:28:38	347	0.23	1025.37	0.3
03:09:2004:10:29:08	410	0.32	1025.37	0.4
03:09:2004:10:29:38	442	0.40	1023.91	0.6
03:09:2004:10:30:09	410	0.41	1024.64	0.8
03:09:2004:10:30:39	410	0.40	1024.64	1.0
03:09:2004:10:31:09	379	0.40	1024.64	1.2
03:09:2004:10:31:39	347	0.40	1024.64	1.4
03:09:2004:10:32:09	316	0.40	1024.64	1.6
03:09:2004:10:32:39	316	0.40	1024.64	1.8
03:09:2004:10:33:09	284	0.40	1024.64	2.0
03:09:2004:10:33:39	252	0.40	1024.64	2.2
03:09:2004:10:34:09	252	0.40	1024.64	2.4
03:09:2004:10:34:39	-63	0.00	1028.30	2.6
03:09:2004:10:35:09	-32	0.00	1028.30	2.6
03:09:2004:10:35:39	-32	0.00	1028.30	2.6
03:09:2004:10:36:09	-63	0.00	1028.30	2.6
03:09:2004:10:36:37	Reset Total, Vol = 2.55 m3			
03:09:2004:10:36:37	-63	0.00	1028.30	2.6
03:09:2004:10:36:39	-63	0.00	1029.03	0.0
03:09:2004:10:36:56	2.9m3 Tank Guage			
03:09:2004:10:36:56	-63	0.00	1028.30	0.0
03:09:2004:10:37:09	-63	0.00	1028.30	0.0
03:09:2004:10:37:39	-63	0.00	1028.30	0.0
03:09:2004:10:38:09	-63	0.00	1028.30	0.0
03:09:2004:10:38:39	-63	0.00	1028.30	0.0
03:09:2004:10:39:09	-63	0.00	1028.30	0.0
03:09:2004:10:39:39	-63	0.00	1028.30	0.0
03:09:2004:10:40:09	-63	0.00	1028.30	0.0
03:09:2004:10:40:39	-63	0.00	1028.30	0.0
03:09:2004:10:41:09	-63	0.00	1028.30	0.0
03:09:2004:10:41:39	-63	0.00	1028.30	0.0

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:09:2004:10:42:40	-63	0.00	1028.30	0.0
03:09:2004:10:43:10	-63	0.00	1028.30	0.0
03:09:2004:10:43:40	-63	0.00	1028.30	0.0
03:09:2004:10:44:10	-63	0.00	1028.30	0.0
03:09:2004:10:44:40	-63	0.00	1028.30	0.0
03:09:2004:10:45:10	-63	0.00	1028.30	0.0
03:09:2004:10:45:40	-63	0.00	1028.30	0.0
03:09:2004:10:46:10	-63	0.00	1028.30	0.0
03:09:2004:10:46:40	-95	0.00	1028.30	0.0
03:09:2004:10:47:10	-95	0.00	1028.30	0.0
03:09:2004:10:47:40	-95	0.00	1028.30	0.0
03:09:2004:10:48:10	32	0.00	1029.03	0.0
03:09:2004:10:48:40	7954	0.00	1028.30	0.0
03:09:2004:10:49:10	14234	0.00	1028.30	0.0
03:09:2004:10:49:40	13919	0.00	1028.30	0.0
03:09:2004:10:50:10	13792	0.00	1028.30	0.0
03:09:2004:10:50:40	13729	0.00	1028.30	0.0
03:09:2004:10:51:10	13666	0.00	1028.30	0.0
03:09:2004:10:51:40	13603	0.00	1028.30	0.0
03:09:2004:10:52:10	13571	0.00	1028.30	0.0
03:09:2004:10:52:40	10100	0.00	1028.30	0.0
03:09:2004:10:53:10	10100	0.00	1028.30	0.0
03:09:2004:10:53:40	10068	0.00	1028.30	0.0
03:09:2004:10:54:11	10037	0.00	1028.30	0.0
03:09:2004:10:54:41	10005	0.00	1027.56	0.0
03:09:2004:10:55:06	Pressure Test Lines			
03:09:2004:10:55:06	10005	0.00	1028.30	0.0
03:09:2004:10:55:11	10005	0.00	1028.30	0.0
03:09:2004:10:55:41	9973	0.00	1028.30	0.0
03:09:2004:10:56:11	-95	0.00	1028.30	0.0
03:09:2004:10:56:41	-95	0.00	1028.30	0.0
03:09:2004:10:57:11	-95	0.00	1028.30	0.0
03:09:2004:10:57:41	-95	0.00	1028.30	0.0
03:09:2004:10:58:11	-158	0.00	1028.30	0.0
03:09:2004:10:58:41	-158	0.00	1028.30	0.0
03:09:2004:10:59:11	-32	0.00	1031.22	0.0
03:09:2004:10:59:41	-63	0.25	1031.95	0.1
03:09:2004:11:00:11	-126	0.00	1031.95	0.1
03:09:2004:11:00:41	-158	0.00	1031.22	0.1
03:09:2004:11:01:11	-95	0.00	953.70	0.1
03:09:2004:11:01:41	-95	0.00	845.45	0.1
03:09:2004:11:02:11	-126	0.00	838.87	0.1
03:09:2004:11:02:41	-126	0.00	717.47	0.1
03:09:2004:11:03:11	-126	0.00	962.47	0.1
03:09:2004:11:03:41	-126	0.00	983.68	0.1
03:09:2004:11:04:11	-95	0.00	914.20	0.1
03:09:2004:11:04:41	-126	0.00	983.68	0.1
03:09:2004:11:05:12	-158	0.00	1011.47	0.1
03:09:2004:11:05:42	-158	0.00	1003.43	0.1
03:09:2004:11:06:12	-158	0.00	1006.35	0.1
03:09:2004:11:06:42	-158	0.00	1005.62	0.1
03:09:2004:11:07:02	Wait on H2O			
03:09:2004:11:07:02	-158	0.00	1009.28	0.1
03:09:2004:11:07:12	-158	0.00	1011.47	0.0
03:09:2004:11:07:42	0	0.00	1013.67	0.0
03:09:2004:11:08:12	0	0.00	1012.21	0.0
03:09:2004:11:08:42	0	0.00	1012.94	0.0
03:09:2004:11:09:12	0	0.00	1018.06	0.0
03:09:2004:11:09:42	0	0.00	1001.23	0.0
03:09:2004:11:10:12	0	0.00	1020.25	0.0
03:09:2004:11:10:42	0	0.00	1015.86	0.0
03:09:2004:11:11:12	0	0.00	1001.97	0.0
03:09:2004:11:11:42	32	0.00	907.62	0.0

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:09:2004:11:12:12	32	0.00	953.70	0.0
03:09:2004:11:12:42	0	0.00	1008.55	0.0
03:09:2004:11:13:12	32	0.00	967.59	0.0
03:09:2004:11:13:42	0	0.00	1013.67	0.0
03:09:2004:11:14:12	0	0.00	1005.62	0.0
03:09:2004:11:14:42	0	0.00	1010.01	0.0
03:09:2004:11:15:12	0	0.00	1010.01	0.0
03:09:2004:11:15:42	0	0.00	1009.28	0.0
03:09:2004:11:16:12	0	0.00	1018.79	0.0
03:09:2004:11:16:43	0	0.00	1012.94	0.0
03:09:2004:11:17:13	0	0.00	1013.67	0.0
03:09:2004:11:17:43	0	0.00	1012.21	0.0
03:09:2004:11:18:13	0	0.00	1015.13	0.0
03:09:2004:11:18:43	0	0.00	1020.98	0.0
03:09:2004:11:19:13	0	0.00	1020.25	0.0
03:09:2004:11:19:43	0	0.00	1020.25	0.0
03:09:2004:11:20:13	0	0.00	1018.79	0.0
03:09:2004:11:20:43	-32	0.00	1021.71	0.0
03:09:2004:11:21:13	-32	0.00	1023.91	0.0
03:09:2004:11:21:43	0	0.00	1010.01	0.0
03:09:2004:11:22:13	-32	0.00	1021.71	0.0
03:09:2004:11:22:43	-32	0.00	1023.18	0.0
03:09:2004:11:23:13	-32	0.00	1023.91	0.0
03:09:2004:11:23:43	-32	0.00	1024.64	0.0
03:09:2004:11:24:13	-32	0.00	1024.64	0.0
03:09:2004:11:24:43	-32	0.00	1024.64	0.0
03:09:2004:11:25:13	-32	0.00	1023.91	0.0
03:09:2004:11:25:43	-32	0.00	1024.64	0.0
03:09:2004:11:26:13	-32	0.00	1024.64	0.0
03:09:2004:11:26:43	-32	0.00	1024.64	0.0
03:09:2004:11:27:13	-32	0.00	1025.37	0.0
03:09:2004:11:27:43	-32	0.00	1025.37	0.0
03:09:2004:11:28:14	-32	0.00	1025.37	0.0
03:09:2004:11:28:44	-32	0.00	1026.10	0.0
03:09:2004:11:29:14	-32	0.00	1025.37	0.0
03:09:2004:11:29:44	-32	0.00	1026.10	0.0
03:09:2004:11:30:14	-32	0.00	1026.83	0.0
03:09:2004:11:30:44	-32	0.00	1026.10	0.0
03:09:2004:11:31:14	0	0.00	966.86	0.0
03:09:2004:11:31:44	-32	0.00	1026.10	0.0
03:09:2004:11:32:14	-32	0.00	1021.71	0.0
03:09:2004:11:32:44	126	0.00	1004.16	0.0
03:09:2004:11:33:14	95	0.00	986.61	0.0
03:09:2004:11:33:44	726	0.42	1006.35	0.2
03:09:2004:11:34:14	789	0.42	971.98	0.4
03:09:2004:11:34:44	789	0.42	1018.06	0.6
03:09:2004:11:35:14	95	0.00	761.35	0.6
03:09:2004:11:35:44	32	0.00	940.53	0.6
03:09:2004:11:36:14	-32	0.00	957.35	0.6
03:09:2004:11:36:44	-32	0.00	982.95	0.0
03:09:2004:11:36:46	Start Cement Slurry			
03:09:2004:11:36:46	-32	0.00	971.25	0.0
03:09:2004:11:37:14	-63	0.00	975.64	0.0
03:09:2004:11:37:44	-63	0.00	980.76	0.0
03:09:2004:11:38:14	-63	0.00	993.19	0.0
03:09:2004:11:38:44	-95	0.00	993.19	0.0
03:09:2004:11:39:14	-95	0.00	996.85	0.0
03:09:2004:11:39:45	-95	0.00	1008.55	0.0
03:09:2004:11:40:15	-95	0.00	1007.82	0.0
03:09:2004:11:40:45	-63	0.00	982.95	0.0
03:09:2004:11:41:15	-126	0.00	1010.74	0.0
03:09:2004:11:41:45	-95	0.00	1001.97	0.0
03:09:2004:11:42:15	-95	0.00	864.47	0.0

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:09:2004:11:42:45	-126	0.00	1003.43	0.0
03:09:2004:11:43:15	-126	0.00	1007.82	0.0
03:09:2004:11:43:45	-95	0.00	1065.59	0.0
03:09:2004:11:44:15	-95	0.00	1108.75	0.0
03:09:2004:11:44:45	-95	0.00	1419.57	0.0
03:09:2004:11:45:15	-95	0.00	1598.03	0.0
03:09:2004:11:45:45	-126	0.00	1715.78	0.0
03:09:2004:11:46:15	-126	0.00	1775.75	0.0
03:09:2004:11:46:45	347	0.42	1871.56	0.1
03:09:2004:11:47:15	347	0.42	1848.15	0.3
03:09:2004:11:47:45	126	0.42	1818.17	0.5
03:09:2004:11:48:15	63	0.42	1911.05	0.7
03:09:2004:11:48:45	1736	0.66	1887.65	0.9
03:09:2004:11:49:15	284	0.00	1815.97	1.1
03:09:2004:11:49:45	316	0.42	1836.45	1.2
03:09:2004:11:50:15	221	0.17	1859.12	1.4
03:09:2004:11:50:45	189	0.17	1875.21	1.4
03:09:2004:11:51:16	-252	0.00	1867.17	1.5
03:09:2004:11:51:46	221	0.42	1819.63	1.6
03:09:2004:11:52:16	158	0.17	1776.48	1.7
03:09:2004:11:52:46	-252	0.00	1805.00	1.8
03:09:2004:11:53:16	-252	0.00	1850.35	1.8
03:09:2004:11:53:46	-252	0.00	1879.60	1.8
03:09:2004:11:54:16	-252	0.00	1900.08	1.8
03:09:2004:11:54:46	-252	0.00	1905.20	1.8
03:09:2004:11:55:16	-221	0.00	1897.15	1.8
03:09:2004:11:55:46	-221	0.00	1886.91	1.8
03:09:2004:11:56:16	126	0.24	1891.30	1.8
03:09:2004:11:56:46	-221	0.00	1908.12	1.9
03:09:2004:11:57:16	-252	0.00	2006.13	1.9
03:09:2004:11:57:46	-252	0.00	2006.86	1.9
03:09:2004:11:58:16	95	0.41	1583.40	1.9
03:09:2004:11:58:46	-252	0.00	1541.71	2.0
03:09:2004:11:59:16	-221	0.00	1438.59	2.0
03:09:2004:11:59:46	95	0.42	2003.20	2.0
03:09:2004:12:00:16	158	0.42	1886.91	2.2
03:09:2004:12:00:46	95	0.42	1923.48	2.4
03:09:2004:12:01:16	158	0.42	1738.45	2.6
03:09:2004:12:01:46	-252	0.00	1488.32	2.7
03:09:2004:12:02:00	Flush Lines			
03:09:2004:12:02:00	-252	0.00	1489.05	2.7
03:09:2004:12:02:16	126	0.00	1137.27	2.7
03:09:2004:12:02:46	-221	0.00	1023.91	2.7
03:09:2004:12:03:17	-221	0.00	1024.64	2.7
03:09:2004:12:03:47	-221	0.00	1024.64	2.7
03:09:2004:12:04:17	-221	0.00	1024.64	2.7
03:09:2004:12:04:47	-221	0.00	1024.64	2.7
03:09:2004:12:05:02	Drop Top Plug			
03:09:2004:12:05:02	-252	0.00	1024.64	2.7
03:09:2004:12:05:03	Start Displacement			
03:09:2004:12:05:03	-252	0.00	1024.64	2.7
03:09:2004:12:05:06	Reset Total, Vol = 2.70 m3			
03:09:2004:12:05:06	-252	0.00	1024.64	2.7
03:09:2004:12:05:17	-252	0.00	1023.91	0.0
03:09:2004:12:05:47	-32	0.40	1023.91	0.1
03:09:2004:12:06:17	-63	0.41	1023.91	0.3
03:09:2004:12:06:47	-63	0.41	1023.91	0.5
03:09:2004:12:07:17	-63	0.41	1023.91	0.7
03:09:2004:12:07:47	-63	0.36	1023.91	0.9
03:09:2004:12:08:17	-63	0.36	1023.91	1.0
03:09:2004:12:08:47	-63	0.36	1024.64	1.2
03:09:2004:12:09:17	-63	0.36	1024.64	1.4
03:09:2004:12:09:47	-63	0.36	1024.64	1.6

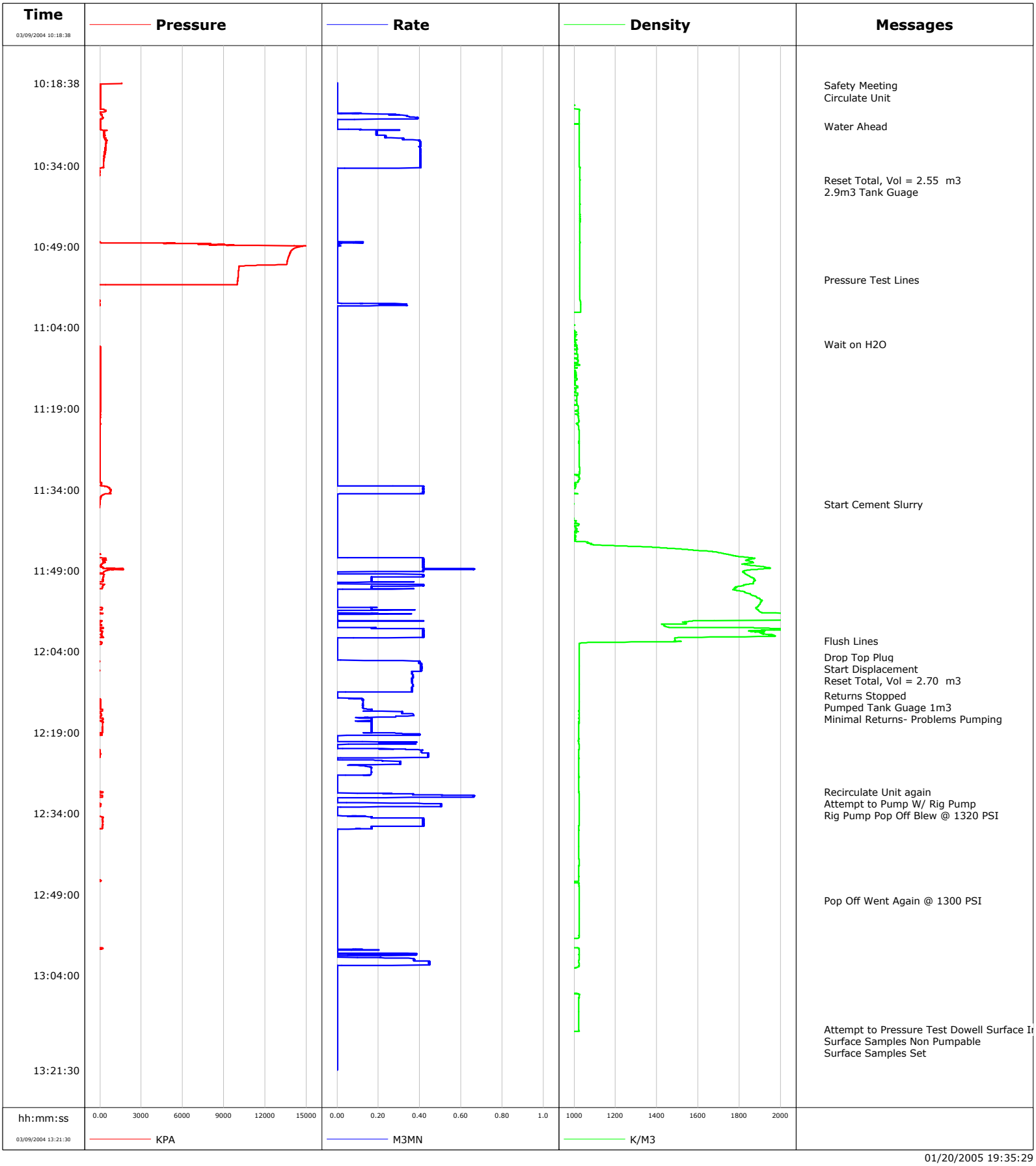
Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:09:2004:12:10:17	-63	0.36	1024.64	1.8
03:09:2004:12:10:47	-63	0.36	1024.64	2.0
03:09:2004:12:11:17	-63	0.36	1023.91	2.1
03:09:2004:12:11:47	-158	0.00	1024.64	2.2
03:09:2004:12:12:06	Returns Stopped			
03:09:2004:12:12:06	-158	0.00	1023.91	2.2
03:09:2004:12:12:17	Pumped Tank Guage 1m3			
03:09:2004:12:12:17	-158	0.00	1023.91	2.2
03:09:2004:12:12:47	32	0.12	1023.91	2.2
03:09:2004:12:13:17	32	0.13	1025.37	2.3
03:09:2004:12:13:47	32	0.13	1024.64	2.3
03:09:2004:12:14:17	32	0.13	1024.64	2.4
03:09:2004:12:14:48	189	0.17	1023.91	2.5
03:09:2004:12:15:02	Minimal Returns- Problems Pumping			
03:09:2004:12:15:02	95	0.14	1023.18	2.5
03:09:2004:12:15:18	32	0.31	1023.91	2.6
03:09:2004:12:15:48	95	0.37	1023.91	2.8
03:09:2004:12:16:18	189	0.17	1023.18	2.9
03:09:2004:12:16:48	32	0.15	1023.91	3.0
03:09:2004:12:17:18	189	0.17	1023.18	3.1
03:09:2004:12:17:48	189	0.17	1023.18	3.2
03:09:2004:12:18:18	189	0.17	1022.44	3.2
03:09:2004:12:18:48	189	0.17	1022.44	3.3
03:09:2004:12:19:18	158	0.40	1021.71	3.4
03:09:2004:12:19:48	-158	0.00	1022.44	3.5
03:09:2004:12:20:18	-189	0.00	1022.44	3.5
03:09:2004:12:20:48	-189	0.21	1022.44	3.6
03:09:2004:12:21:18	-221	0.00	1023.91	3.7
03:09:2004:12:21:48	-221	0.00	1023.91	3.7
03:09:2004:12:22:18	-32	0.41	1023.18	3.8
03:09:2004:12:22:48	0	0.44	1023.18	4.0
03:09:2004:12:23:18	0	0.44	1023.18	4.2
03:09:2004:12:23:48	-189	0.00	1023.91	4.4
03:09:2004:12:24:18	-221	0.31	1023.18	4.4
03:09:2004:12:24:48	-221	0.31	1023.18	4.6
03:09:2004:12:25:18	-221	0.16	1023.18	4.6
03:09:2004:12:25:48	-221	0.17	1023.18	4.7
03:09:2004:12:26:19	-221	0.17	1023.18	4.8
03:09:2004:12:26:49	-221	0.17	1023.18	4.9
03:09:2004:12:27:19	-221	0.00	1023.18	4.9
03:09:2004:12:27:49	-221	0.00	1023.18	4.9
03:09:2004:12:28:19	-221	0.00	1023.18	4.9
03:09:2004:12:28:49	-221	0.00	1023.18	4.9
03:09:2004:12:29:19	-189	0.00	1023.18	4.9
03:09:2004:12:29:49	-221	0.00	1022.44	4.9
03:09:2004:12:30:00	Recirculate Unit again			
03:09:2004:12:30:00	221	0.00	1023.18	4.9
03:09:2004:12:30:01	Attempt to Pump W/ Rig Pump			
03:09:2004:12:30:01	221	0.00	1023.18	4.9
03:09:2004:12:30:03	Rig Pump Pop Off Blew @ 1320 PSI			
03:09:2004:12:30:03	221	0.00	1022.44	4.9
03:09:2004:12:30:19	-126	0.31	1023.91	4.9
03:09:2004:12:30:49	189	0.66	1023.91	5.2
03:09:2004:12:31:19	-158	0.00	1024.64	5.3
03:09:2004:12:31:49	-189	0.00	1024.64	5.3
03:09:2004:12:32:19	63	0.50	1024.64	5.5
03:09:2004:12:32:49	-126	0.00	1024.64	5.7
03:09:2004:12:33:19	-221	0.00	1024.64	5.7
03:09:2004:12:33:49	-221	0.00	1025.37	5.7
03:09:2004:12:34:19	-221	0.00	1024.64	5.7
03:09:2004:12:34:49	189	0.40	1024.64	5.7
03:09:2004:12:35:19	189	0.42	1023.91	5.9
03:09:2004:12:35:49	189	0.42	1023.91	6.1

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:09:2004:12:36:19	189	0.42	1023.18	6.4
03:09:2004:12:36:49	-32	0.10	1023.18	6.4
03:09:2004:12:37:19	-95	0.00	1023.18	6.5
03:09:2004:12:37:50	-95	0.00	1023.18	6.5
03:09:2004:12:38:20	-95	0.00	1022.44	6.5
03:09:2004:12:38:50	-95	0.00	1022.44	6.5
03:09:2004:12:39:20	-95	0.00	1022.44	6.5
03:09:2004:12:39:50	-95	0.00	1022.44	6.5
03:09:2004:12:40:20	-95	0.00	1022.44	6.5
03:09:2004:12:40:50	-95	0.00	1022.44	6.5
03:09:2004:12:41:20	-95	0.00	1022.44	6.5
03:09:2004:12:41:50	-158	0.00	1023.18	6.5
03:09:2004:12:42:20	-221	0.00	1023.18	6.5
03:09:2004:12:42:50	-252	0.00	1023.91	6.5
03:09:2004:12:43:20	-252	0.00	1023.91	6.5
03:09:2004:12:43:50	-252	0.00	1023.18	6.5
03:09:2004:12:44:20	-252	0.00	1023.18	6.5
03:09:2004:12:44:50	-252	0.00	1023.18	6.5
03:09:2004:12:45:20	-252	0.00	1023.18	6.5
03:09:2004:12:45:50	-189	0.00	1023.18	6.5
03:09:2004:12:46:20	0	0.00	1023.18	6.5
03:09:2004:12:46:50	-158	0.00	1023.18	6.5
03:09:2004:12:47:20	-221	0.00	1023.91	6.5
03:09:2004:12:47:50	-221	0.00	1023.91	6.5
03:09:2004:12:48:20	-221	0.00	1023.91	6.5
03:09:2004:12:48:50	-221	0.00	1023.91	6.5
03:09:2004:12:49:21	-221	0.00	1023.91	6.5
03:09:2004:12:49:51	-252	0.00	1023.91	6.5
03:09:2004:12:50:08	Pop Off Went Again @ 1300 PSI			
03:09:2004:12:50:08	-252	0.00	1023.91	6.5
03:09:2004:12:50:21	-284	0.00	1023.91	6.5
03:09:2004:12:50:51	-252	0.00	1023.91	6.5
03:09:2004:12:51:21	-252	0.00	1023.91	6.5
03:09:2004:12:51:51	-252	0.00	1023.91	6.5
03:09:2004:12:52:21	-252	0.00	1023.91	6.5
03:09:2004:12:52:51	-252	0.00	1023.91	6.5
03:09:2004:12:53:21	-252	0.00	1023.91	6.5
03:09:2004:12:53:51	-252	0.00	1023.91	6.5
03:09:2004:12:54:21	-252	0.00	1023.91	6.5
03:09:2004:12:54:51	-252	0.00	1023.91	6.5
03:09:2004:12:55:21	-252	0.00	1023.91	6.5
03:09:2004:12:55:51	-284	0.00	1023.91	6.5
03:09:2004:12:56:21	-284	0.00	1023.91	6.5
03:09:2004:12:56:51	-252	0.00	1023.91	6.5
03:09:2004:12:57:21	-221	0.00	946.38	6.5
03:09:2004:12:57:51	-221	0.00	838.14	6.5
03:09:2004:12:58:21	-221	0.00	585.09	6.5
03:09:2004:12:58:51	-158	0.00	897.38	6.5
03:09:2004:12:59:21	-221	0.00	1023.91	6.5
03:09:2004:12:59:51	-221	0.11	1023.91	6.5
03:09:2004:13:00:21	-221	0.00	1023.91	6.6
03:09:2004:13:00:52	-126	0.37	1023.91	6.7
03:09:2004:13:01:22	-63	0.45	1023.18	6.8
03:09:2004:13:01:52	-252	0.45	1023.91	7.1
03:09:2004:13:02:22	-284	0.00	1022.44	7.2
03:09:2004:13:02:52	-221	0.00	923.71	7.2
03:09:2004:13:03:22	-252	0.00	961.74	7.2
03:09:2004:13:03:52	-252	0.00	814.01	7.2
03:09:2004:13:04:22	-252	0.00	820.59	7.2
03:09:2004:13:04:52	-252	0.00	827.17	7.2
03:09:2004:13:05:22	-252	0.00	818.39	7.2
03:09:2004:13:05:52	-252	0.00	799.38	7.2
03:09:2004:13:06:22	-252	0.00	778.90	7.2

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:09:2004:13:06:52	-252	0.00	776.71	7.2
03:09:2004:13:07:22	-252	0.00	952.23	7.2
03:09:2004:13:07:52	-252	0.00	1023.91	7.2
03:09:2004:13:08:22	-252	0.00	1023.18	7.2
03:09:2004:13:08:52	-252	0.00	1022.44	7.2
03:09:2004:13:09:22	-252	0.00	1022.44	7.2
03:09:2004:13:09:52	-252	0.00	1021.71	7.2
03:09:2004:13:10:22	-252	0.00	1022.44	7.2
03:09:2004:13:10:52	-252	0.00	1021.71	7.2
03:09:2004:13:11:22	-252	0.00	1021.71	7.2
03:09:2004:13:11:52	-252	0.00	1021.71	7.2
03:09:2004:13:12:23	-252	0.00	1021.71	7.2
03:09:2004:13:12:53	-252	0.00	1021.71	7.2
03:09:2004:13:13:23	-252	0.00	1021.71	7.2
03:09:2004:13:13:53	-252	0.00	1021.71	7.2
03:09:2004:13:14:00	Attempt to Pressure Test Dowell Surface Iron			
03:09:2004:13:14:00	-252	0.00	1021.71	7.2
03:09:2004:13:14:23	-252	0.00	1001.97	7.2
03:09:2004:13:14:53	-252	0.00	304.98	7.2
03:09:2004:13:15:00	Surface Samples Non Pumpable			
03:09:2004:13:15:00	-252	0.00	304.98	7.2
03:09:2004:13:15:23	-252	0.00	304.98	7.2
03:09:2004:13:15:53	-252	0.00	305.71	7.2
03:09:2004:13:16:23	-252	0.00	305.71	7.2
03:09:2004:13:16:53	-252	0.00	304.98	7.2
03:09:2004:13:17:23	-221	0.00	304.98	7.2
03:09:2004:13:17:53	-252	0.00	304.98	7.2
03:09:2004:13:18:23	-252	0.00	305.71	7.2
03:09:2004:13:18:53	-221	0.00	305.71	7.2
03:09:2004:13:19:23	-252	0.00	304.98	7.2
03:09:2004:13:19:53	-221	0.00	304.98	7.2
03:09:2004:13:20:23	-221	0.00	304.98	7.2
03:09:2004:13:20:53	-221	0.00	304.98	7.2
03:09:2004:13:21:23	-221	0.00	305.71	7.2

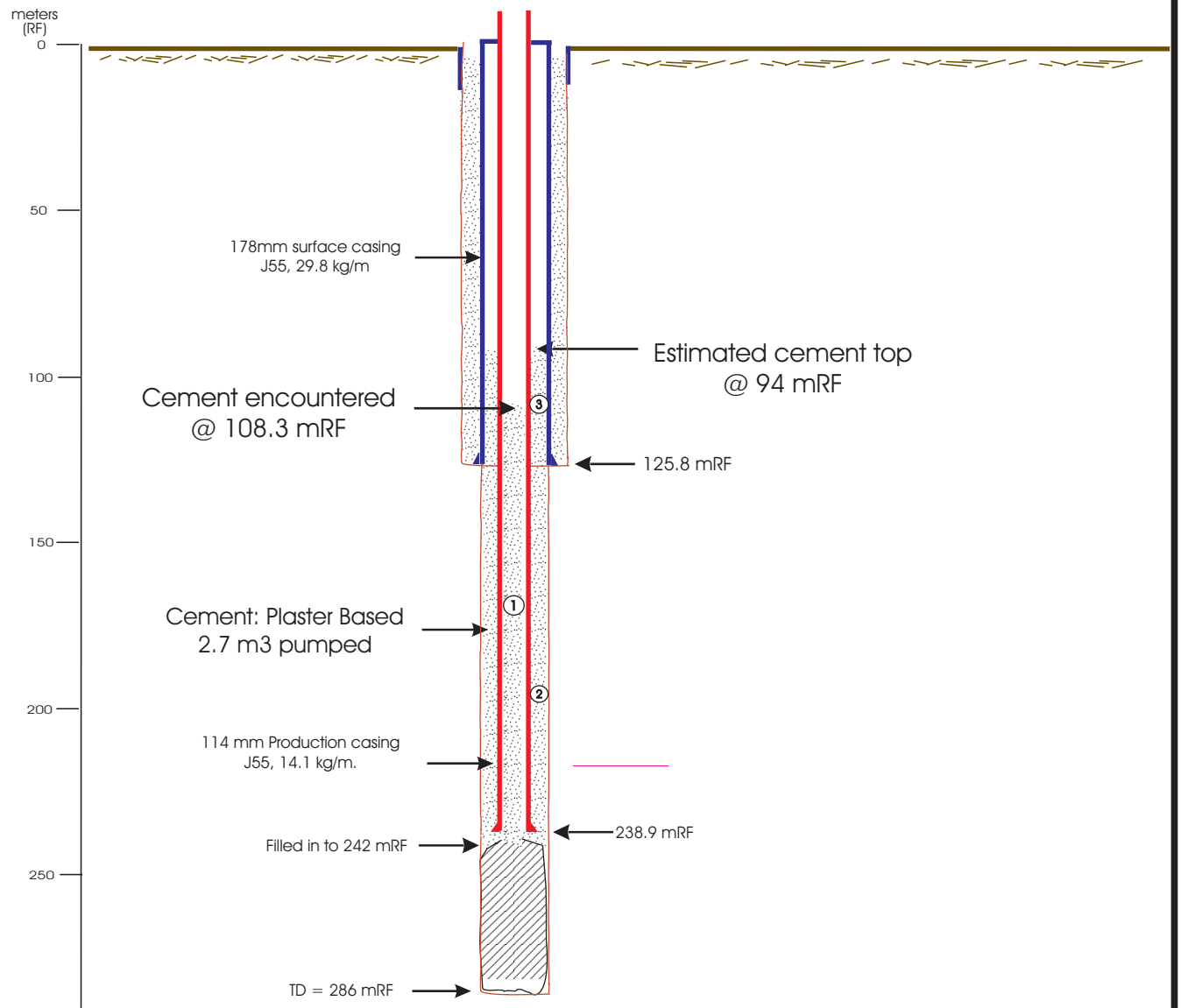
Schlumberger Cementing Job Report

Well	Flatbay 1 - Cement Prod Casin	**Client**	Vulcan
Field		**SIR No.**	2203840303
Engineer	Kevin Law	**Job Type**	Surface
Country	Canada	**Job Date**	03-09-2004



Appendix - VII

Cement Top Calculation



Area	Description	Top	Bottom	Length	Fill up rate	Volume
		mRF	mRF	m	(m3 per m)	(m3)
1	Inside 114 mm casing	108	238	130	0.0085	**1.10**
2	114 mm casing to Open hole (165 mm)	126	238	112	0.0112	**1.25**
3	114 mm casing to 177 mm casing	94	126	32	0.0109	**0.35**
					Total:	**2.70**

VULCAN minerals inc

FLAT BAY #1
Cement Top Calculation
Conditions Prior to Drill Out 2004-03-10

Scale: NA

Drawn by: J. Gorman
Date: 2004-12-06

Drawing No: VUL - FB1 - CEM1
Rev: 0

Appendix - VIII

Casing Pressure Test Record
March 10th, 2004


2000

Appendix - IX

Proposed Frac Program
Jan 6th, 2004

Schlumberger

YF“GO”III FRACTURING PROPOSAL
FOR
VULCAN MINERALS

FLATBAY #1

4 TONNE FRAC
DOWN CASING

REVISION #2

BRUCE RIEGER
TECHNICAL REPRESENTATIVE
BUSINESS: (403) 509-4142
CELL: (403) 519-0087
FAX: (403) 509-4120
E-MAIL: rieger@calgary.oilfield.slb.com

January 6, 2004
CALGARY, ALBERTA

SERVICE FROM DISTRICT:
DARTMOUTH (902) 468-6474

Schlumberger

WELL DATA

WELL NAME:	Flatbay #1
STATUS:	Oil
FORMATION:	Spout Falls
FRAC GRADIENT:	24.0 kPa/metre
NET FORMATION HEIGHT:	5 metres
PERFORATIONS:	~220 metres
CASING:	114.0 mm; 14.14 kg/metre; J55 (assumed)
TUBING:	60 mm, EUE, 6.99 kg/m J55
TUBING VOLUME:	0.5 m^3
B.H.S.P.:	???? kPa
B.H.S.T.:	15 ^oC

Schlumberger

DESIGN SUMMARY
BATCH-FRAC

SPEARHEAD ACID:	500 Liters of 15% HCL Acid + 0.2% A262 Inhibitor + 0.5% F105 Surfactant + 1.0% U42 Iron Chelant + 0.5% W60 Demulsifier
FRAC FLUID:	YF"GO"III made with Frac Oil containing: 1.0% J452 Gelling Agent 0.3% J601/J602 Activator (batch mixed) 0.7% J601/J602 Activator (added on the fly) 1.0 kg/m^3 J59 Breaker
PAD:	8,000 litres YF"GO"III
FRAC:	4,500 litres YF"GO"III
PROPPANT:	4,000 kg. 20/40 Mesh Sand
FLUSH:	400 litres Frac Oil containing 8 litres of W60
FRAC PRESSURE:	+ 5,280 kPa
FRICTION PRESSURE:	+ 990 kPa
HYDROSTATIC HEAD:	- 1,760 kPa
ANTICIPATED SURFACE TREATING PRESSURE:	= 4,500 kPa
MAXIMUM SURFACE TREATING PRESSURE (WELLHEAD RATING):	14,000 kPa
INTERNAL YIELD PRESSURE OF CASING:	30,200 kPa

Schlumberger

DESIGN SUMMARY (CON'D)
BATCH-FRAC

ANTICIPATED RATE:	Approximately 1.0 m^3/minute
REQUIRED PUMPING EQUIPMENT:	73 kW 1 C&A Pumper 1 Liquid Add Pump
	FRAC OIL
FLUID REQUIREMENTS:	2.0 m^3 (Acid Placement and hole fill) 13.0 m^3 (Frac) 5.0 m^3 (Tank Bottom)
TOTAL FLUID:	20.0 m^3

Schlumberger

TREATMENT PROCEDURE

1) Move in and rig up Well Services Equipment perform acid squeeze followed by sand fracturing treatment to treat down tubing. Rig up to record annulus and tubing pressure.

2) Conduct a Safety and Procedure meeting with all personnel present before treatment begins.

3) Fill and pressure test the treating lines to 25,000 kPa.

4) Fill hole with diesel.

5) Circulate 500 liters of 15% Acid down tubing to tubing bottom. When acid at formation, shut in annulus and wait 5 minutes.

6) Squeeze acid at maximum rate to achieve fracture initiation. Do not exceed wellhead MAWP. Displace acid with oil.

7) Batch mix 10.0 litres/m^3 of J452 Gelling Agent and 3.0 litres/m^3 of J601/J602 Activator in Frac Oil in tanks as follows:

   Pad = 8.0 m^3 plus tank bottom volume in Frac Tank
   600 KgPA Stage = 2.3 m^3 in C&A Tank #1
   1,200 KgPA Stage = 1.9 m^3 in C&A Tank #2

8) Add sand as required to C&A Tanks 1 and 2. Maintain rapid tank agitation.

9) Pump 8,000 litres of YF"GO"III pad down casing. Add 7.0 litres/m^3 of J601/J602 Activator on the fly. Pump at approximately 1.0 m^3/minute. Add J59 Breaker just prior to pumping down hole.

10) Fracture well with 3.7 tonnes of 20/40 Mesh Sand in 4,100 litres YF"GO"III (as per attached schedule). Add 7.0 litres/m^3 of J601/J602 Activator on the fly. Pump at approximately 1.0 m^3/minute. Add J59 Breaker just prior to pumping down hole.

11) Underdisplace by 0.1 m^3 with 400 litres Frac Oil (or pad fluid with breaker added but do not add additional activator on the fly). **Do not overflush**. Add 8 litres of W60 to flush.

    Note: If premature Screen out occurs, reverse circulate hole clean.

12) Close well in; bleed all pressure off of lines and rig out equipment.

13) Shut in overnight; flow back at a controlled rate. Test and evaluate.

DO NOT EXCEED MAWP OF WELLHEAD

Schlumberger

PUMPING SCHEDULE

YF'GO'III

Stage	Clean Fluid Volume m^3	Cumulative Clean Fluid m^3	Stage Slurry Volume m^3	Cumulative Slurry Volume m^3	Prop Type	BH Prop Con kgPA	Proppant Per Stage kg	Cumulative Proppant kg	Slurry Rate m^3/min	Clean Rate m^3/min
Pad	8.00	8.00	8.00	8.00		0	0	0	1.00	1.00
2	2.30	10.30	2.82	10.82	20/40 SAND	600	1380	1380	1.00	0.82
3	1.90	12.20	2.76	13.58	20/40 SAND	1200	2280	3660	1.00	0.69
Flush	0.40	12.60	0.40	13.98		0	0	3660	1.00	1.00
Totals	**12.60**	**12.60**	**13.98**	**13.98**			**3660**	**3660**		

Clean Fluid and *Clean Rate* do not include proppant.

Stage	Clean Fluid Volume m^3	J59 Breaker Conc. kg/m^3
Pad	8.00	1.00
2	2.30	1.00
3	1.90	1.00
Flush	0.40	1.00
Totals	**12.60**	**13.00**

Displacement volume should be recalculated on location.

Schlumberger

SAFETY CONSIDERATIONS

SAFE HANDLING OF CHEMICALS

Chemicals vary greatly in hazardous properties. Some chemicals can be handled safely without any special protective equipment, while others do require such equipment. Of the materials to be used on this treatment, special considerations should be given to the following:

YF"GO"III	J59 Breaker
Frac Oil	J452 Gelling Agent
J601/602 Activator	
15% HCL	W60 Non-emulsifying agent
A262 Inhibitor	F 104 Surfactant
U42 Chelating agent	

For further information regarding safe handling guidelines and potential health hazards, please refer to "A Guide of the Hazardous Properties of Well Services Products", a Well Services safety publication, and/or to Well Services Material Safety Data Sheets.

STANDARD HOOK-UP

In addition to the safe handling of chemicals, proper procedures for on-location operations must be followed to ensure a safely conducted treatment. Well Services publication "Safety & Loss Prevention Standards 5, 9, 11" provides specific information regarding job planning, hook-up, pressure testing, preparation of fluids, pumping flammable and combustible fluids, emergency shutdown, flowback procedures and other pertinent information.

PUMPING FLAMMABLE AND COMBUSTIBLE FLUIDS

Special consideration is warranted when pumping flammable and combustible fluids, as defined in Well Services "Safety & Loss Prevention Standard 5, Section VIII". It is necessary to determine if the fluid is of a HIGH RISK NATURE and to follow appropriate procedures for handling.

Appendix - X

Tubing & Casing Tally Sheets
March 3rd & Mar 14th, 2004

Operator:VULCAN MINERALS INC.

PIPE TALLY SHEET

							DATE		March 3, 2004	
Vulcan Minerals Inc. Flat Bay #1							**PAGE**	1	of	1
Size	114	**mm Wt.**	14.14	**kg/m Gr**	J55	**Cplg**	ST&C		**Thread**	8rd

Joint	**Length**	**Joint**	**Length**	**Joint**	**Length**	**Joint**	**Length**	**Joint**	**Length**
1	0.20	11	6.78	21	6.72	31	6.77	41	
2	6.78	12	6.77	22	6.78	32	6.79	42	
3	0.35	13	6.78	23	6.72	33	6.78	43	
4	6.78	14	6.78	24	6.78	34	6.78	44	
5	6.78	15	6.74	25	6.76	35	6.78	45	
6	6.77	16	6.78	26	6.79	36	1.11	46	
7	6.76	17	6.75	27	6.78	37	6.72	47	
8	6.73	18	6.77	28	6.75	38	6.79	48	
9	6.78	19	6.71	29	6.77	39		49	
10	6.77	20	6.78	30	6.75	40		50	
A	**54.70**	**B**	**67.64**	**C**	**67.60**	**D**	**48.52**	**E**	**0.00**

Joint		**Joint**	**Length**	**Joint**	**Length**	**Joint**	**Length**	**Joint**	**Length**
51		61		71		81		91	
52		62		72		82		92	
53		63		73		83		93	
54		64		74		84		94	
55		65		75		85		95	
56		66		76		86		96	
57		67		77		87		97	
58		68		78		88		98	
59		69		79		89		99	
60		70		80		90		100	
F	**0.00**	**G**	**0.00**	**H**	**0.00**	**I**	**0.00**	**J**	**0.00**

A	54.70			Shoe	included				
B	67.64	122.34		Collar	in attached			**Joints**	**Length**
C	67.60	189.94				**full jts this pg**		37	238.46
D	48.52	238.46				**jts f/ pg 2**			
E	0.00	238.46				**total full jts run**		37	238.46
F	0.00	238.46				**Joints on Location**			
G	0.00	238.46			**Remarks:**				
H	0.00	238.46			Transcribed by J.E.G.from hand field notes.				
I	0.00	238.46			KB - GL = 1.3 m. Pipe Stickup = 0.8 above GL.				
J	0.00	238.46			Pipe Landed at : 238.46 +1.3 - 0.8 = 238.96 mKB				
Total	238.46				Daily Report States csg @ 237.91 mKB				
					Completion Log States 232 m KB				

Operator:VULCAN MINERALS INC.

PIPE TALLY SHEET

							DATE		March 14, 2004		
NAME: Vulcan Minerals Inc. FB #1							**PAGE**	1	of	1	
Size	60.3	**mm Wt.**	6.99	**kg/m Gr**	J55	**Cplg**	EUE		**Thread**		
Joint	**Length**	**Joint**	**Length**	**Joint**	**Length**	**Joint**	**Length**		**Joint**	**Length**	
1	9.62	11	9.60	21		31			41		
2	0.33	12	9.60	22		32			42		
3	9.61	13	9.60	23		33			43		
4	9.61	14	9.61	24		34			44		
5	9.59	15	9.60	25		35			45		
6	9.60	16	9.61	26		36			46		
7	9.59	17	9.61	27		37			47		
8	9.59	18	9.61	28		38			48		
9	9.61	19	9.60	29		39			49		
10	9.61	20	9.60	30		40			50		
A	**86.76**	**B**	**96.04**	**C**	**0.00**	**D**	**0.00**		**E**	**0.00**	
Joint		**Joint**	**Length**	**Joint**	**Length**	**Joint**	**Length**		**Joint**	**Length**	
151		161		171		181			191		
152		162		172		182			192		
153		163		173		183			193		
154		164		174		184			194		
155		165		175		185			195		
156		166		176		186			196		
157		167		177		187			197		
158		168		178		188			198		
159		169		179		189			199		
160		170		180		190			200		
F	**0.00**	**G**	**0.00**	**H**	**0.00**	**I**	**0.00**		**J**	**0.00**	

A	86.76										
B	96.04	182.80							**Joints**	**Length**	
C	0.00	182.80					**full jts this pg**		20	182.80	
D	0.00	182.80					**jts f/ pg 2**				
E	0.00	182.80					**total full jts run**		20	182.80	
F	0.00	182.80					**Joints on Location**				
G	0.00	182.80			**Remarks:**						
H	0.00	182.80			Tubing Stick up = 1.3 above GL (@0.0 mRF.) GL - RF = 1.3 m						
I	0.00				Joint #2 is PSN						
page2					Tubing set 182.9 mRF from tally.						
J					Tally transcribed from field notes.						
Total	182.80										

Appendix - XI

Schlumberger Frac Job Report
March 16th, 2004

Schlumberger

Service Order

2005-Jan-20

Customer	Person Taking Call	Dowell Location	OrderDate	Job Number
VULCAN MINERALS INC.	Burgess, Lara	Dartmouth, NS	2004-Mar-15	**2203840304**

Well Name and Number	Legal Location	Field	County	State/Province
Flat Bay 1				Newfoundland

Well Master:	API / UWI:
0630581738	

Rig Name	Well Age	Sales Engineer	Job Type
Petro Drilling Co.	New	Rieger, Bruce	Frac,All YF "GO"

Time Well Ready:	Deviation	Bit Size	Well MD	Well TVD	BHP	BHST	BHCT
3/16/2004 7:00 AM	°	mm	230 m	286 m	kPa	11 °C	25 °C

Treat Down	Packer Type	Packer Depth	WellHead Connection	HHP on Location	Max AllowedPressure	Max Allowed AnnPressure
Tubing	None	m	2 3/8" swage		14000	14000

Casing

Depth, m	Size, mm	Weight, kg/m	Grade	Thread
239.66	114	14.15	J55	8rd

Tubing

Depth,	Size, mm	Weight, kg/m	Grade	Thread
180	60	7	J55	N/A

Perforated Intervals

Top, m	Bottom, m	spm	No. of Shots	Total Interval
192	197	13	65	m
				Diameter
				mm

Services Instructions:

Supply men, equipment and materials perform acid squeeze then to fracture well perforations @ 192m to 197m.

Extra Equipment:

Expected On Location: 3/16/2004 7:00 AM **Ready To Pump:** 3/16/2004 10:00 AM

Contact	Voice	Mobile	FAX	Notes
Ed Weiterman	709 689 0075			
Mark Stocking	519 872 0335			

Notes:

Directions:

Approx 147 km from Port aux Basque turn Left on to road for Flat Bay. Drive 7 km then turn Right onto lease road.

Other Notes:

Comments:

Fluid Systems:

15% HCL

500 litre H015 + 1 litre A262 + 2.5 litre F103 + 5 litre U042 + 2.5 litre W54

Density:		kg/m³	*Thickening Time:*		
Yield:		ft³/sk	*Viscosity:*		cp
H2O Mix:	0		*Break Time:*		
H2O:	0	m³	*Eq. Sack Weight:*	0	lb
			Total Blend:	0	sacks

Dowell Code	Conc/ Amount		Total Quantity
W54	2.5	litre	2.5
U042	5	litre	5
F103	2.5	litre	2.5
A262	1	litre	1
H015	500	litre	500

YF GO III

15m3 Frac Oil+3600kg 20/40 sand +180 litreJ452 + 167 litre J601 + 35litre J602+35 kgJ059 + 8litreW60

Density:		kg/m³	*Thickening Time:*		
Yield:		ft³/sk	*Viscosity:*		cp
H2O Mix:	0		*Break Time:*		
H2O:	0	m³	*Eq. Sack Weight:*	0	lb
			Total Blend:	0	sacks

Dowell Code	Conc/ Amount		Total Quantity
W60	8	litre	8
J059	35	kg	35
J602	35	litre	35
J601	167	litre	167
J452	180	litre	180

Schlumberger

Stimulation Service Report

Customer	Job Number
VULCAN MINERALS INC.	2203840304

Well	Location (legal)	Schlumberger Location	Job Start
Flat Bay 1		Dartmouth, NS	2004-Mar-16

Field	Formation Name/Type	Deviation	BitSize:	Well MD	Well TVD
		°	m	230 m	286 m

County	State/Province	BHP	BHST	BHCT	Pore Pres Gradient
	Newfoundland	kPa	11 °C	25 °C	24 kPa/m

Well Maste	API / UW
0630581738	

Rig Name	Drilled For	Service Via
Petro Drilling Co.	Oil	

Offshore Zone	Well Class	Well Type
	New	Development

Primary Treating Fluid	Polymer Loading	Fluid Density
YFGOIII	lb/1000gal	kg/m³

Service Line	Job Type
Fracturing	Frac,All YF "GO"

Max. Allowed Tubing Pressure	Max. Allowed Ann. Pressure	WellHead Connection
14000 kPa	14000 kPa	2 3/8" swage

Service Instructions

Supply men, equipment and materials perform acid squeeze then to fracture well perforations @ 192m to 197m.

Job Scheduled For:	Arrived on Location:	Leave Location:
3/16/2004 7:00	2004-Mar-16 7:00	2004-Mar-16 19:00

Casing/Liner

Depth, m	Size, mm	Weight, kg/m	Grade	Thread
239.66	114	14.15	J55	8rd

Tubing/Drill Pipe

Depth,	Size, mm	Weight, kg/m	Grade	Thread
180	60	7	J55	N/A

Perforations/Open Hole

Top, m	Bottom, m	spm	No. of Shots	Total Interval
192	197	13	65	m
				Diameter
				mm

Treat Down	Displacement	Packer Type	Packer Depth
Tubing	0.4 m³	None	m

Tubing Vol.	CasingVol.	AnnularVol.	OpenHoleVol
0.346 m³	2.03 m³	1.5 m³	1.5 m³

Date	Time	Treating Pressure	Flow Rate	Volume	0	0	0	0	0	Message
	24 hr clock	kPa	m3/min	m3	0	0	0	0	0	
2004-Mar-16	10:57	63	0.40	0.0	0	0	0	0	0	
2004-Mar-16	10:57	442	0.30	0.1	0	0	0	0	0	
2004-Mar-16	10:57									Safety Meeting Completed
2004-Mar-16	10:57	284	0.38	0.2	0	0	0	0	0	
2004-Mar-16	10:57									Circulate Truck
2004-Mar-16	10:58	473	0.52	0.4	0	0	0	0	0	
2004-Mar-16	10:58									Start Acid Job Prime Up
2004-Mar-16	10:58	410	0.52	0.4	0	0	0	0	0	
2004-Mar-16	10:59	347	0.52	0.9	0	0	0	0	0	
2004-Mar-16	11:00	379	0.52	1.5	0	0	0	0	0	
2004-Mar-16	11:01	442	0.52	2.0	0	0	0	0	0	
2004-Mar-16	11:02	410	0.52	2.5	0	0	0	0	0	
2004-Mar-16	11:03	537	0.52	3.0	0	0	0	0	0	
2004-Mar-16	11:04	158	0.00	3.1	0	0	0	0	0	
2004-Mar-16	11:04									Fill Lines
2004-Mar-16	11:04	158	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:05	410	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:05	126	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:05									Pressure Test Dowell Valve
2004-Mar-16	11:06	16412	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:07	11867	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:08	9248	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:08									Surface Lines Good
2004-Mar-16	11:08	5618	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:08									Reset Total, Vol = 0.00 m3

Well	Field	Service Date	Customer	Job Number
Flat Bay #1		2004-Mar-16	VULCAN MINERALS INC.	2203840304

Date	Time	Treating Pressure	Flow Rate	Volume	0	0	0	0	0	Message
	24 hr clock	kPa	m3/min	m3	0	0	0	0	0	
2004-Mar-16	11:08	10731	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:09	12530	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:10	11078	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:11	126	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:11									Pressure Test Customer Valve
2004-Mar-16	11:11	126	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:12	1042	0.40	0.1	0	0	0	0	0	
2004-Mar-16	11:13	3188	0.57	0.6	0	0	0	0	0	
2004-Mar-16	11:13	2367	0.58	0.7	0	0	0	0	0	
2004-Mar-16	11:13									Fill Hole
2004-Mar-16	11:14	4008	0.58	1.2	0	0	0	0	0	
2004-Mar-16	11:15	3472	0.57	1.7	0	0	0	0	0	
2004-Mar-16	11:16	1957	0.57	2.3	0	0	0	0	0	
2004-Mar-16	11:17									Reset Total, Vol = 2.49 m3
2004-Mar-16	11:17	-158	0.00	2.5	0	0	0	0	0	
2004-Mar-16	11:17	-158	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:17	-221	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:17									Start Acid Circ Down tbg
2004-Mar-16	11:18	-252	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:19	-316	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:20	284	0.23	0.0	0	0	0	0	0	
2004-Mar-16	11:20									Start Pumping Acid
2004-Mar-16	11:20	505	0.26	0.1	0	0	0	0	0	
2004-Mar-16	11:21	1957	0.26	0.4	0	0	0	0	0	
2004-Mar-16	11:22	-158	0.11	0.5	0	0	0	0	0	
2004-Mar-16	11:23	-379	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:24									Acid Pumped
2004-Mar-16	11:24	-379	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:24	-379	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:24									Acid @ tbg Bottom
2004-Mar-16	11:24	-379	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:24	-379	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:24									Monitor 5 mins
2004-Mar-16	11:25	-379	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:26	-379	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:27	-379	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:27	-410	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:27									Sqeeze
2004-Mar-16	11:27									Reset Total, Vol = 0.50 m3
2004-Mar-16	11:27	-379	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:28	5650	0.05	0.0	0	0	0	0	0	
2004-Mar-16	11:28									Pump to Wash Perfs
2004-Mar-16	11:28	5807	0.06	0.0	0	0	0	0	0	
2004-Mar-16	11:29	5744	0.39	0.3	0	0	0	0	0	
2004-Mar-16	11:30									ISIP
2004-Mar-16	11:30	2020	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:30	1988	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:30	1831	0.00	0.5	0	0	0	0	0	
2004-Mar-16	11:30									Reset Total, Vol = 0.49 m3

Well	Field	Service Date	Customer	Job Number
Flat Bay #1		2004-Mar-16	VULCAN MINERALS INC.	2203840304

Date	Time	Treating Pressure	Flow Rate	Volume	0	0	0	0	0	Message
	24 hr clock	kPa	m3/min	m3	0	0	0	0	0	
2004-Mar-16	11:30	1736	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:30									5 Mins Complete
2004-Mar-16	11:31	1547	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:32	1199	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:33	852	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:34	631	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:35	473	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:35									Pump Over Flush
2004-Mar-16	11:35	442	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:36	7954	0.91	0.5	0	0	0	0	0	
2004-Mar-16	11:37	3377	0.00	1.1	0	0	0	0	0	
2004-Mar-16	11:37									ISIP
2004-Mar-16	11:37	3314	0.00	1.1	0	0	0	0	0	
2004-Mar-16	11:37	3030	0.00	1.1	0	0	0	0	0	
2004-Mar-16	11:37									Flush Complete
2004-Mar-16	11:37									Reset Total, Vol = 1.12 m3
2004-Mar-16	11:37	2746	0.00	1.1	0	0	0	0	0	
2004-Mar-16	11:38	2525	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:38									Mix Gel & sands
2004-Mar-16	11:38	2272	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:39	1357	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:40	-410	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:41	-442	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:42	-442	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:43	-442	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:44	-442	0.00	0.0	0	0	0	0	0	
2004-Mar-16	11:45	-221	0.34	0.1	0	0	0	0	0	
2004-Mar-16	11:46	-221	0.36	0.4	0	0	0	0	0	
2004-Mar-16	11:47	-221	0.35	0.8	0	0	0	0	0	
2004-Mar-16	11:48	-221	0.35	1.1	0	0	0	0	0	
2004-Mar-16	11:49	-221	0.35	1.5	0	0	0	0	0	
2004-Mar-16	11:50	-221	0.35	1.8	0	0	0	0	0	
2004-Mar-16	11:51	-221	0.35	2.2	0	0	0	0	0	
2004-Mar-16	11:52	-252	0.35	2.5	0	0	0	0	0	
2004-Mar-16	11:53	-252	0.36	2.9	0	0	0	0	0	
2004-Mar-16	11:54	-221	0.36	3.2	0	0	0	0	0	
2004-Mar-16	11:55	-252	0.36	3.6	0	0	0	0	0	
2004-Mar-16	11:56	-221	0.36	3.9	0	0	0	0	0	
2004-Mar-16	11:57	-252	0.36	4.3	0	0	0	0	0	
2004-Mar-16	11:58	-252	0.36	4.7	0	0	0	0	0	
2004-Mar-16	11:59	-252	0.36	5.0	0	0	0	0	0	
2004-Mar-16	12:00	-252	0.35	5.4	0	0	0	0	0	
2004-Mar-16	12:01	-252	0.36	5.7	0	0	0	0	0	
2004-Mar-16	12:02	-442	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:03	-442	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:04	-442	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:05	-442	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:06	-442	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:07	-442	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:08	-442	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:08									Start geling Oil 11m3
2004-Mar-16	12:08	-442	0.00	6.0	0	0	0	0	0	

Well	Field	Service Date	Customer	Job Number
Flat Bay #1		2004-Mar-16	VULCAN MINERALS INC.	2203840304

Date	Time	Treating Pressure	Flow Rate	Volume	0	0	0	0	0	Message
	24 hr clock	kPa	m3/min	m3	0	0	0	0	0	
2004-Mar-16	12:09	-473	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:10	-473	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:11	-473	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:12	-473	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:13	-473	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:14	-505	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:15	-505	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:16	-505	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:17	-505	0.00	6.0	0	0	0	0	0	
2004-Mar-16	12:18	-379	0.46	6.3	0	0	0	0	0	
2004-Mar-16	12:19	-379	0.46	6.7	0	0	0	0	0	
2004-Mar-16	12:20	-379	0.46	7.2	0	0	0	0	0	
2004-Mar-16	12:21	-379	0.46	7.6	0	0	0	0	0	
2004-Mar-16	12:22	-410	0.46	8.1	0	0	0	0	0	
2004-Mar-16	12:23	-379	0.46	8.6	0	0	0	0	0	
2004-Mar-16	12:24	-410	0.46	9.0	0	0	0	0	0	
2004-Mar-16	12:25	-410	0.46	9.5	0	0	0	0	0	
2004-Mar-16	12:26	-410	0.46	9.9	0	0	0	0	0	
2004-Mar-16	12:27	-410	0.46	10.4	0	0	0	0	0	
2004-Mar-16	12:28	-410	0.46	10.9	0	0	0	0	0	
2004-Mar-16	12:29	-410	0.46	11.3	0	0	0	0	0	
2004-Mar-16	12:30	-410	0.46	11.8	0	0	0	0	0	
2004-Mar-16	12:31	-410	0.46	12.2	0	0	0	0	0	
2004-Mar-16	12:32	-410	0.46	12.7	0	0	0	0	0	
2004-Mar-16	12:33	-442	0.46	13.2	0	0	0	0	0	
2004-Mar-16	12:34	-442	0.46	13.6	0	0	0	0	0	
2004-Mar-16	12:35	-442	0.46	14.1	0	0	0	0	0	
2004-Mar-16	12:36	-442	0.46	14.5	0	0	0	0	0	
2004-Mar-16	12:37	-442	0.46	15.0	0	0	0	0	0	
2004-Mar-16	12:38	-442	0.46	15.5	0	0	0	0	0	
2004-Mar-16	12:39	-473	0.46	15.9	0	0	0	0	0	
2004-Mar-16	12:40									Start adding cross linkers
2004-Mar-16	12:40	-442	0.46	16.2	0	0	0	0	0	
2004-Mar-16	12:40	-473	0.46	16.4	0	0	0	0	0	
2004-Mar-16	12:41	-442	0.46	16.9	0	0	0	0	0	
2004-Mar-16	12:42	-473	0.46	17.3	0	0	0	0	0	
2004-Mar-16	12:43	-473	0.46	17.8	0	0	0	0	0	
2004-Mar-16	12:44	-473	0.46	18.2	0	0	0	0	0	
2004-Mar-16	12:45	-473	0.46	18.7	0	0	0	0	0	
2004-Mar-16	12:46	-473	0.46	19.2	0	0	0	0	0	
2004-Mar-16	12:47	-473	0.46	19.6	0	0	0	0	0	
2004-Mar-16	12:48	-473	0.46	20.1	0	0	0	0	0	
2004-Mar-16	12:49	-473	0.46	20.5	0	0	0	0	0	
2004-Mar-16	12:50	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	12:51	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	12:52	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	12:53	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	12:54	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	12:55	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	12:56	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	12:57	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	12:58	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	12:59	-27238	0.00	20.6	0	0	0	0	0	

Well	Field	Service Date	Customer	Job Number
Flat Bay #1		2004-Mar-16	VULCAN MINERALS INC.	2203840304

Date	Time	Treating Pressure	Flow Rate	Volume	0	0	0	0	0	Message
	24 hr clock	kPa	m3/min	m3	0	0	0	0	0	
2004-Mar-16	13:00	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:01	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:02	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:03	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:04	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:05	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:06	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:07	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:08	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:09	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:10	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:11	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:12	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:13	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:14	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:15	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:16	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:17	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:18	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:19	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:20	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:21	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:22	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:23	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:24	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:25	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:26	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:27	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:28	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:29	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:30	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:31	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:32	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:33	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:34	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:35	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:36	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:37	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:38	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:39	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:40	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:41	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:42	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:43	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:44	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:45	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:46	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:47	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:48	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:49	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:50	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:51	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:52	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:53	-27238	0.00	20.6	0	0	0	0	0	

Well	Field	Service Date	Customer	Job Number
Flat Bay #1		2004-Mar-16	VULCAN MINERALS INC.	2203840304

Date	Time	Treating Pressure	Flow Rate	Volume	0	0	0	0	0	Message
	24 hr clock	kPa	m3/min	m3	0	0	0	0	0	
2004-Mar-16	13:54	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:55	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:56	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:57	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:58	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	13:59	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:00	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:00									Added breaker. Gel Broke out
2004-Mar-16	14:00	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:01	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:02	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:03	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:04	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:05	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:06	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:07	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:08	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:09	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:10	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:11	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:12	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:13	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:14	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:15	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:16	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:17	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:18	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:19	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:20	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:21	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:22	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:23	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:24	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:25	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:26	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:27	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:28	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:29	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:30	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:31	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:32	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:33	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:34	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:35	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:36	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:37	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:38	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:39	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:40	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:41	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:42	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:43	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:44	-27238	0.00	20.6	0	0	0	0	0	

Well	Field	Service Date	Customer	Job Number
Flat Bay #1		2004-Mar-16	VULCAN MINERALS INC.	2203840304

Date	Time	Treating Pressure	Flow Rate	Volume	0	0	0	0	0	Message
	24 hr clock	kPa	m3/min	m3	0	0	0	0	0	
2004-Mar-16	14:45	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:46	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:47	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:48	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:49	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:50	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:51	-27238	0.00	20.6	0	0	0	0	0	
2004-Mar-16	14:52	-27238	0.00	20.6	0	0	0	0	0	

Post Job Summary

Average Injection Rates, m³/m

Fluid	N2	CO2	Maximum Rate
0.8	0	0	1

Volume of Fluid Injected, m³

Clean Fluid	Acid	Oil	CO2	N2 (scm)
4	0.5			

Treating Pressure Summary, kPa

Breakdown	Maximum	Final	Average	ISIP	15 Min. ISIP
10000	10000	7300	7200	3600	

Quantity of 20/40 & placed, kg

Total Injected	Total Ordered/Designed
0	3600

N2 Percent	CO2 Percent	Designed Fluid Volume	Displacement	Slurry Volume	Pad Volume	Percent Pad
0 %	0 %	5500 l	1 m³	0 m³	0 l	70 %

Customer or Authorized Representative	Schlumberger Supervisor	Number of Stages	Fracture Gradient	
Stocking, Mark	Kevin Law	3	24 kPa/m	☐ Job Completed ☐ Screen Out

Schlumberger *Service Quality Evaluation*

Stimulation - Acidizing, Fracturing & Other

Client:	VULCAN MINERALS INC.	**Service Order #:**	2203840304 SQE #: 1
Field:		**Date:**	2004-Mar-17
Rig:	Petro Drilling Co.	**Operating Time:**	0.00 hrs.
Well:	Flat Bay 1	**Client Rep:**	Stocking, Mark
Service Line:	Fracturing	**Schlumberger Engineer:**	Kevin Law
Job Type:	Frac,All YF "GO"	**Schlumberger FSM:**	Burgess, Lara

Main Objective*: **Pump acid and Fracture well.**

To be completed by Company Rep. Please answer Y (Yes) or N (No) and add any comments below.

		Score	Yes / No	Result
1	**HSE**			
1a	Free of lost time injury and full compliance with SLB and location specific HSE practice.	5	☑ Yes ☐ No	5
1b	Free of environmental spill or non-compliant discharge.	5	☑ Yes ☐ No	5
			Sub-total	100%
2	**Design / Preparation**			
2a	Program including job simulation (CADE) and pumping schedule on location, discussed and agreed upon with client	3	☑ Yes ☐ No	3
2b	Equipment maintenance schedule completed / Green Tagged.	2	☑ Yes ☐ No	2
2c	All materials and equipment required for job / contingency checked and on location.	2	☑ Yes ☐ No	2
2d	Safety / pre-job meeting conducted with all involved present.	2	☑ Yes ☐ No	2
			Sub-total	100%
3	**Execution**			
3a	Job completed with no lost time	3	☐ Yes ☑ No	0
3b	Equipment pressure tested successfully	2	☑ Yes ☐ No	2
3c	All key parameters monitored and recorded accurately (Pressure, Rate, Density).	2	☑ Yes ☐ No	2
3d	Personnel performed as per expectations.	2	☑ Yes ☐ No	2
3e	Equipment performed as per expectations.	2	☑ Yes ☐ No	2
			Sub-total	73%
4	**Evaluation**			
4a	Main job objective achieved with no consequential non productive time	10	☐ Yes ☑ No	0
			Sub-total	0%

Total 68%

Comments: (Please include a brief explanation for a "NO" response and summarise any innovations attempted on this well.)

Client:	**Schlumberger:**
	Rigged up on Location, Safety meeting, Conducted pressure testing, Circulated well, perfromed acid job, established a break down @ 10 mpa. The Frac system momens proir to being pumped had the breaker added to it and with in a short time the gel broke.
Client Signature:	**Schlumberger Signature:**

Schlumberger

Job Date: 03-16-2004

Customer:	Vulcan
District:	Dartmouth, NS
Representative:	Mark Stocking
DS Supervisor:	Kevin Law
Well:	Flatbay 1 - Frac

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:16:2004:10:57:21	63	0.40	-748.91	0.0
03:16:2004:10:57:40	Safety Meeting Completed			
03:16:2004:10:57:40	442	0.30	-748.91	0.1
03:16:2004:10:57:51	347	0.38	-748.91	0.2
03:16:2004:10:57:57	Circulate Truck			
03:16:2004:10:57:57	284	0.38	-748.91	0.2
03:16:2004:10:58:16	Start Acid Job Prime Up			
03:16:2004:10:58:16	473	0.52	-748.91	0.4
03:16:2004:10:58:21	410	0.52	-748.91	0.4
03:16:2004:10:58:51	410	0.52	-748.91	0.7
03:16:2004:10:59:21	347	0.52	-748.91	0.9
03:16:2004:10:59:51	410	0.52	-748.91	1.2
03:16:2004:11:00:21	379	0.52	-748.91	1.5
03:16:2004:11:00:52	442	0.52	-748.91	1.7
03:16:2004:11:01:22	442	0.52	-748.91	2.0
03:16:2004:11:01:52	473	0.52	-748.91	2.2
03:16:2004:11:02:22	410	0.52	-748.91	2.5
03:16:2004:11:02:52	537	0.52	266.76	2.8
03:16:2004:11:03:22	537	0.52	266.76	3.0
03:16:2004:11:03:52	126	0.00	266.76	3.1
03:16:2004:11:04:22	158	0.00	269.51	3.1
03:16:2004:11:04:51	Fill Lines			
03:16:2004:11:04:51	158	0.00	270.42	0.0
03:16:2004:11:04:52	158	0.00	270.42	0.0
03:16:2004:11:05:22	410	0.00	268.59	0.0
03:16:2004:11:05:41	Pressure Test Dowell Valve			
03:16:2004:11:05:41	126	0.00	269.51	0.0
03:16:2004:11:05:52	95	0.00	268.59	0.0
03:16:2004:11:06:22	16412	0.00	269.51	0.0
03:16:2004:11:06:52	13635	0.00	270.42	0.0
03:16:2004:11:07:22	11867	0.00	270.42	0.0
03:16:2004:11:07:52	10415	0.00	270.42	0.0
03:16:2004:11:08:22	9248	0.00	271.34	0.0
03:16:2004:11:08:47	Surface Lines Good			
03:16:2004:11:08:47	5618	0.00	272.25	0.0
03:16:2004:11:08:52	10699	0.00	272.25	0.0
03:16:2004:11:08:53	Reset Total, Vol = 0.00 m3			
03:16:2004:11:08:53	10731	0.00	272.25	0.0
03:16:2004:11:09:22	12530	0.00	272.25	0.0
03:16:2004:11:09:52	12025	0.00	273.16	0.0
03:16:2004:11:10:22	11078	0.00	273.16	0.0
03:16:2004:11:10:52	10226	0.00	273.16	0.0
03:16:2004:11:11:17	Pressure Test Customer Valve			
03:16:2004:11:11:17	126	0.00	273.16	0.0
03:16:2004:11:11:22	126	0.00	273.16	0.0
03:16:2004:11:11:52	63	0.00	273.16	0.0
03:16:2004:11:12:23	1042	0.40	273.16	0.1
03:16:2004:11:12:53	1610	0.44	271.34	0.3
03:16:2004:11:13:23	3188	0.57	270.42	0.6
03:16:2004:11:13:38	Fill Hole			
03:16:2004:11:13:38	2367	0.58	269.51	0.7
03:16:2004:11:13:53	2399	0.57	269.51	0.9
03:16:2004:11:14:23	4008	0.58	272.25	1.2
03:16:2004:11:14:53	3756	0.57	274.08	1.5
03:16:2004:11:15:23	3472	0.57	-748.91	1.7
03:16:2004:11:15:53	3472	0.57	-748.91	2.0
03:16:2004:11:16:23	1957	0.57	-748.91	2.3

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:16:2004:11:17:21	Reset Total, Vol = 2.49 m3			
03:16:2004:11:17:21	-158	0.00	-748.91	2.5
03:16:2004:11:17:23	-158	0.00	-748.91	0.0
03:16:2004:11:17:46	Start Acid Circ Down tbg			
03:16:2004:11:17:46	-221	0.00	-748.91	0.0
03:16:2004:11:17:53	-221	0.00	-748.91	0.0
03:16:2004:11:18:23	-252	0.00	-748.91	0.0
03:16:2004:11:18:53	-284	0.00	-748.91	0.0
03:16:2004:11:19:23	-316	0.00	-748.91	0.0
03:16:2004:11:19:53	-316	0.00	-748.91	0.0
03:16:2004:11:20:04	Start Pumping Acid			
03:16:2004:11:20:04	284	0.23	-748.91	0.0
03:16:2004:11:20:23	505	0.26	-748.91	0.1
03:16:2004:11:20:53	316	0.26	-748.91	0.2
03:16:2004:11:21:23	1957	0.26	-748.91	0.4
03:16:2004:11:21:53	-126	0.10	-748.91	0.4
03:16:2004:11:22:23	-158	0.11	-748.91	0.5
03:16:2004:11:22:53	-379	0.00	-748.91	0.5
03:16:2004:11:23:23	-379	0.00	-748.91	0.5
03:16:2004:11:23:54	-379	0.00	-748.91	0.5
03:16:2004:11:24:07	Acid Pumped			
03:16:2004:11:24:07	-379	0.00	-748.91	0.5
03:16:2004:11:24:22	Acid @ tbg Bottom			
03:16:2004:11:24:22	-379	0.00	-748.91	0.5
03:16:2004:11:24:24	-379	0.00	-748.91	0.5
03:16:2004:11:24:37	Monitor 5 mins			
03:16:2004:11:24:37	-379	0.00	-748.91	0.5
03:16:2004:11:24:54	-379	0.00	-748.91	0.5
03:16:2004:11:25:24	-379	0.00	-748.91	0.5
03:16:2004:11:25:54	-379	0.00	-748.91	0.5
03:16:2004:11:26:24	-379	0.00	-748.91	0.5
03:16:2004:11:26:54	-379	0.00	-748.91	0.5
03:16:2004:11:27:24	-379	0.00	-748.91	0.5
03:16:2004:11:27:46	Sqeeze			
03:16:2004:11:27:46	-410	0.00	-748.91	0.5
03:16:2004:11:27:48	Reset Total, Vol = 0.50 m3			
03:16:2004:11:27:48	-379	0.00	-748.91	0.5
03:16:2004:11:27:54	-379	0.00	-748.91	0.0
03:16:2004:11:28:24	5650	0.05	-748.91	0.0
03:16:2004:11:28:26	Pump to Wash Perfs			
03:16:2004:11:28:26	5807	0.06	-748.91	0.0
03:16:2004:11:28:54	6691	0.28	-748.91	0.1
03:16:2004:11:29:24	5744	0.39	-748.91	0.3
03:16:2004:11:29:54	2430	0.00	-748.91	0.5
03:16:2004:11:30:21	ISIP			
03:16:2004:11:30:21	2020	0.00	-748.91	0.5
03:16:2004:11:30:24	1988	0.00	-748.91	0.5
03:16:2004:11:30:42	Reset Total, Vol = 0.49 m3			
03:16:2004:11:30:42	1831	0.00	-748.91	0.5
03:16:2004:11:30:54	1736	0.00	-748.91	0.0
03:16:2004:11:30:56	5 Mins Complete			
03:16:2004:11:30:56	1736	0.00	-748.91	0.0
03:16:2004:11:31:24	1547	0.00	-748.91	0.0
03:16:2004:11:31:54	1389	0.00	-748.91	0.0
03:16:2004:11:32:24	1199	0.00	-748.91	0.0
03:16:2004:11:32:54	1010	0.00	-748.91	0.0
03:16:2004:11:33:24	852	0.00	-748.91	0.0
03:16:2004:11:33:54	726	0.00	-748.91	0.0
03:16:2004:11:34:24	631	0.00	-748.91	0.0
03:16:2004:11:34:54	537	0.00	-748.91	0.0
03:16:2004:11:35:21	Pump Over Flush			
03:16:2004:11:35:21	473	0.00	-748.91	0.0
03:16:2004:11:35:25	442	0.00	-748.91	0.0

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:16:2004:11:35:55	7164	0.64	-748.91	0.1
03:16:2004:11:36:25	7954	0.91	-748.91	0.5
03:16:2004:11:36:55	7449	0.91	-748.91	1.0
03:16:2004:11:37:21	ISIP			
03:16:2004:11:37:21	3377	0.00	-748.91	1.1
03:16:2004:11:37:25	3314	0.00	-748.91	1.1
03:16:2004:11:37:41	Flush Complete			
03:16:2004:11:37:41	3030	0.00	-748.91	1.1
03:16:2004:11:37:55	2777	0.00	-748.91	1.1
03:16:2004:11:37:57	Reset Total, Vol = 1.12 m3			
03:16:2004:11:37:57	2746	0.00	-748.91	1.1
03:16:2004:11:38:10	Mix Gel & sands			
03:16:2004:11:38:10	2525	0.00	-748.91	0.0
03:16:2004:11:38:25	2272	0.00	-748.91	0.0
03:16:2004:11:38:55	1767	0.00	-748.91	0.0
03:16:2004:11:39:25	1357	0.00	-748.91	0.0
03:16:2004:11:39:55	1010	0.00	-748.91	0.0
03:16:2004:11:40:25	-410	0.00	-748.91	0.0
03:16:2004:11:40:55	-410	0.00	-748.91	0.0
03:16:2004:11:41:25	-442	0.00	-748.91	0.0
03:16:2004:11:41:55	-442	0.00	-748.91	0.0
03:16:2004:11:42:25	-442	0.00	-748.91	0.0
03:16:2004:11:42:55	-442	0.00	-748.91	0.0
03:16:2004:11:43:25	-442	0.00	-748.91	0.0
03:16:2004:11:43:55	-442	0.00	-748.91	0.0
03:16:2004:11:44:25	-442	0.00	-748.91	0.0
03:16:2004:11:44:55	-410	0.00	-748.91	0.0
03:16:2004:11:45:25	-221	0.34	-748.91	0.1
03:16:2004:11:45:55	-221	0.35	-748.91	0.2
03:16:2004:11:46:25	-221	0.36	-748.91	0.4
03:16:2004:11:46:56	-221	0.36	-748.91	0.6
03:16:2004:11:47:26	-221	0.35	-748.91	0.8
03:16:2004:11:47:56	-221	0.35	-748.91	0.9
03:16:2004:11:48:26	-221	0.35	-748.91	1.1
03:16:2004:11:48:56	-221	0.35	-748.91	1.3
03:16:2004:11:49:26	-221	0.35	-748.91	1.5
03:16:2004:11:49:56	-221	0.36	-748.91	1.6
03:16:2004:11:50:26	-221	0.35	-748.91	1.8
03:16:2004:11:50:56	-252	0.35	-748.91	2.0
03:16:2004:11:51:26	-221	0.35	-748.91	2.2
03:16:2004:11:51:56	-221	0.35	-748.91	2.4
03:16:2004:11:52:26	-252	0.35	-748.91	2.5
03:16:2004:11:52:56	-252	0.36	-748.91	2.7
03:16:2004:11:53:26	-252	0.36	-748.91	2.9
03:16:2004:11:53:56	-252	0.36	-748.91	3.1
03:16:2004:11:54:26	-221	0.36	-748.91	3.2
03:16:2004:11:54:56	-252	0.36	-748.91	3.4
03:16:2004:11:55:26	-252	0.36	-748.91	3.6
03:16:2004:11:55:56	-221	0.36	-748.91	3.8
03:16:2004:11:56:26	-221	0.36	-748.91	3.9
03:16:2004:11:56:56	-221	0.36	-748.91	4.1
03:16:2004:11:57:26	-252	0.36	-748.91	4.3
03:16:2004:11:57:56	-252	0.36	-748.91	4.5
03:16:2004:11:58:27	-252	0.36	-748.91	4.7
03:16:2004:11:58:57	-252	0.36	-748.91	4.8
03:16:2004:11:59:27	-252	0.36	-748.91	5.0
03:16:2004:11:59:57	-252	0.36	-748.91	5.2
03:16:2004:12:00:27	-252	0.35	-748.91	5.4
03:16:2004:12:00:57	-252	0.36	-748.91	5.5
03:16:2004:12:01:27	-252	0.36	-748.91	5.7
03:16:2004:12:01:57	-252	0.36	-748.91	5.9
03:16:2004:12:02:27	-442	0.00	-748.91	6.0
03:16:2004:12:02:57	-442	0.00	-748.91	6.0

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:16:2004:12:03:27	-442	0.00	-748.91	6.0
03:16:2004:12:03:57	-442	0.00	-748.91	6.0
03:16:2004:12:04:27	-442	0.00	-748.91	6.0
03:16:2004:12:04:57	-442	0.00	-748.91	6.0
03:16:2004:12:05:27	-442	0.00	-748.91	6.0
03:16:2004:12:05:57	-442	0.00	-748.91	6.0
03:16:2004:12:06:27	-442	0.00	-748.91	6.0
03:16:2004:12:06:57	-442	0.00	-748.91	6.0
03:16:2004:12:07:27	-442	0.00	-748.91	6.0
03:16:2004:12:07:57	-442	0.00	-748.91	6.0
03:16:2004:12:08:27	-442	0.00	-748.91	6.0
03:16:2004:12:08:44	Start geling Oil 11m3			
03:16:2004:12:08:44	-442	0.00	-748.91	6.0
03:16:2004:12:08:57	-473	0.00	-748.91	6.0
03:16:2004:12:09:27	-473	0.00	-748.91	6.0
03:16:2004:12:09:58	-473	0.00	-748.91	6.0
03:16:2004:12:10:28	-473	0.00	-748.91	6.0
03:16:2004:12:10:58	-473	0.00	-748.91	6.0
03:16:2004:12:11:28	-473	0.00	-748.91	6.0
03:16:2004:12:11:58	-473	0.00	-748.91	6.0
03:16:2004:12:12:28	-473	0.00	-748.91	6.0
03:16:2004:12:12:58	-473	0.00	-748.91	6.0
03:16:2004:12:13:28	-473	0.00	-748.91	6.0
03:16:2004:12:13:58	-473	0.00	-748.91	6.0
03:16:2004:12:14:28	-505	0.00	-748.91	6.0
03:16:2004:12:14:58	-505	0.00	-748.91	6.0
03:16:2004:12:15:28	-505	0.00	-748.91	6.0
03:16:2004:12:15:58	-505	0.00	-748.91	6.0
03:16:2004:12:16:28	-505	0.00	-748.91	6.0
03:16:2004:12:16:58	-505	0.00	-748.91	6.0
03:16:2004:12:17:28	-505	0.00	-748.91	6.0
03:16:2004:12:17:58	-410	0.37	-748.91	6.0
03:16:2004:12:18:28	-379	0.46	-748.91	6.3
03:16:2004:12:18:58	-379	0.46	-748.91	6.5
03:16:2004:12:19:28	-379	0.46	-748.91	6.7
03:16:2004:12:19:58	-379	0.46	-748.91	6.9
03:16:2004:12:20:28	-379	0.46	-748.91	7.2
03:16:2004:12:20:58	-379	0.46	-748.91	7.4
03:16:2004:12:21:28	-379	0.46	-748.91	7.6
03:16:2004:12:21:59	-379	0.46	-748.91	7.9
03:16:2004:12:22:29	-410	0.46	-748.91	8.1
03:16:2004:12:22:59	-410	0.46	-748.91	8.3
03:16:2004:12:23:29	-379	0.46	-748.91	8.6
03:16:2004:12:23:59	-410	0.46	-748.91	8.8
03:16:2004:12:24:29	-410	0.46	-748.91	9.0
03:16:2004:12:24:59	-379	0.46	-748.91	9.2
03:16:2004:12:25:29	-410	0.46	-748.91	9.5
03:16:2004:12:25:59	-410	0.46	-748.91	9.7
03:16:2004:12:26:29	-410	0.46	-748.91	9.9
03:16:2004:12:26:59	-410	0.46	-748.91	10.2
03:16:2004:12:27:29	-410	0.46	-748.91	10.4
03:16:2004:12:27:59	-410	0.46	-748.91	10.6
03:16:2004:12:28:29	-410	0.46	-748.91	10.9
03:16:2004:12:28:59	-410	0.46	-748.91	11.1
03:16:2004:12:29:29	-410	0.46	-748.91	11.3
03:16:2004:12:29:59	-410	0.46	-748.91	11.6
03:16:2004:12:30:29	-410	0.46	-748.91	11.8
03:16:2004:12:30:59	-410	0.46	-748.91	12.0
03:16:2004:12:31:29	-410	0.46	-748.91	12.2
03:16:2004:12:31:59	-410	0.46	-748.91	12.5
03:16:2004:12:32:29	-410	0.46	-748.91	12.7
03:16:2004:12:32:59	-410	0.46	-748.91	12.9
03:16:2004:12:33:30	-442	0.46	-748.91	13.2

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:16:2004:12:34:00	-410	0.46	-748.91	13.4
03:16:2004:12:34:30	-442	0.46	-748.91	13.6
03:16:2004:12:35:00	-442	0.46	-748.91	13.9
03:16:2004:12:35:30	-442	0.46	-748.91	14.1
03:16:2004:12:36:00	-442	0.46	-748.91	14.3
03:16:2004:12:36:30	-442	0.46	-748.91	14.5
03:16:2004:12:37:00	-442	0.46	-748.91	14.8
03:16:2004:12:37:30	-442	0.46	-748.91	15.0
03:16:2004:12:38:00	-442	0.46	-748.91	15.2
03:16:2004:12:38:30	-442	0.46	-748.91	15.5
03:16:2004:12:39:00	-442	0.46	-748.91	15.7
03:16:2004:12:39:30	-473	0.46	-748.91	15.9
03:16:2004:12:40:00	Start adding cross linkers			
03:16:2004:12:40:00	-442	0.46	-748.91	16.2
03:16:2004:12:40:30	-473	0.46	-748.91	16.4
03:16:2004:12:41:00	-473	0.46	-748.91	16.6
03:16:2004:12:41:30	-442	0.46	-748.91	16.9
03:16:2004:12:42:00	-442	0.46	-748.91	17.1
03:16:2004:12:42:30	-473	0.46	-748.91	17.3
03:16:2004:12:43:00	-473	0.46	-748.91	17.5
03:16:2004:12:43:30	-473	0.46	-748.91	17.8
03:16:2004:12:44:00	-473	0.46	-748.91	18.0
03:16:2004:12:44:30	-473	0.46	-748.91	18.2
03:16:2004:12:45:00	-473	0.46	-748.91	18.5
03:16:2004:12:45:31	-473	0.46	-748.91	18.7
03:16:2004:12:46:01	-473	0.46	-748.91	18.9
03:16:2004:12:46:31	-473	0.46	-748.91	19.2
03:16:2004:12:47:01	-473	0.46	-748.91	19.4
03:16:2004:12:47:31	-473	0.46	-748.91	19.6
03:16:2004:12:48:01	-473	0.46	-748.91	19.9
03:16:2004:12:48:31	-473	0.46	-748.91	20.1
03:16:2004:12:49:01	-473	0.46	-748.91	20.3
03:16:2004:12:49:31	-473	0.46	-748.91	20.5
03:16:2004:12:50:01	-27238	0.00	-748.91	20.6
03:16:2004:12:50:31	-27238	0.00	-748.91	20.6
03:16:2004:12:51:01	-27238	0.00	-748.91	20.6
03:16:2004:12:51:31	-27238	0.00	-748.91	20.6
03:16:2004:12:52:01	-27238	0.00	-748.91	20.6
03:16:2004:12:52:31	-27238	0.00	-748.91	20.6
03:16:2004:12:53:01	-27238	0.00	-748.91	20.6
03:16:2004:12:53:31	-27238	0.00	-748.91	20.6
03:16:2004:12:54:01	-27238	0.00	-748.91	20.6
03:16:2004:12:54:31	-27238	0.00	-748.91	20.6
03:16:2004:12:55:01	-27238	0.00	-748.91	20.6
03:16:2004:12:55:32	-27238	0.00	-748.91	20.6
03:16:2004:12:56:02	-27238	0.00	-748.91	20.6
03:16:2004:12:56:32	-27238	0.00	-748.91	20.6
03:16:2004:12:57:02	-27238	0.00	-748.91	20.6
03:16:2004:12:57:32	-27238	0.00	-748.91	20.6
03:16:2004:12:58:02	-27238	0.00	-748.91	20.6
03:16:2004:12:58:32	-27238	0.00	-748.91	20.6
03:16:2004:12:59:02	-27238	0.00	-748.91	20.6
03:16:2004:12:59:32	-27238	0.00	-748.91	20.6
03:16:2004:13:00:02	-27238	0.00	-748.91	20.6
03:16:2004:13:00:32	-27238	0.00	-748.91	20.6
03:16:2004:13:01:02	-27238	0.00	-748.91	20.6
03:16:2004:13:01:32	-27238	0.00	-748.91	20.6
03:16:2004:13:02:02	-27238	0.00	-748.91	20.6
03:16:2004:13:02:32	-27238	0.00	-748.91	20.6
03:16:2004:13:03:02	-27238	0.00	-748.91	20.6
03:16:2004:13:03:32	-27238	0.00	-748.91	20.6
03:16:2004:13:04:02	-27238	0.00	-748.91	20.6
03:16:2004:13:04:32	-27238	0.00	-748.91	20.6

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:16:2004:13:05:02	-27238	0.00	-748.91	20.6
03:16:2004:13:05:32	-27238	0.00	-748.91	20.6
03:16:2004:13:06:02	-27238	0.00	-748.91	20.6
03:16:2004:13:06:32	-27238	0.00	-748.91	20.6
03:16:2004:13:07:03	-27238	0.00	-748.91	20.6
03:16:2004:13:07:33	-27238	0.00	-748.91	20.6
03:16:2004:13:08:03	-27238	0.00	-748.91	20.6
03:16:2004:13:08:33	-27238	0.00	-748.91	20.6
03:16:2004:13:09:03	-27238	0.00	-748.91	20.6
03:16:2004:13:09:33	-27238	0.00	-748.91	20.6
03:16:2004:13:10:03	-27238	0.00	-748.91	20.6
03:16:2004:13:10:33	-27238	0.00	-748.91	20.6
03:16:2004:13:11:03	-27238	0.00	-748.91	20.6
03:16:2004:13:11:33	-27238	0.00	-748.91	20.6
03:16:2004:13:12:03	-27238	0.00	-748.91	20.6
03:16:2004:13:12:33	-27238	0.00	-748.91	20.6
03:16:2004:13:13:03	-27238	0.00	-748.91	20.6
03:16:2004:13:13:33	-27238	0.00	-748.91	20.6
03:16:2004:13:14:03	-27238	0.00	-748.91	20.6
03:16:2004:13:14:33	-27238	0.00	-748.91	20.6
03:16:2004:13:15:03	-27238	0.00	-748.91	20.6
03:16:2004:13:15:33	-27238	0.00	-748.91	20.6
03:16:2004:13:16:03	-27238	0.00	-748.91	20.6
03:16:2004:13:16:33	-27238	0.00	-748.91	20.6
03:16:2004:13:17:03	-27238	0.00	-748.91	20.6
03:16:2004:13:17:33	-27238	0.00	-748.91	20.6
03:16:2004:13:18:03	-27238	0.00	-748.91	20.6
03:16:2004:13:18:34	-27238	0.00	-748.91	20.6
03:16:2004:13:19:04	-27238	0.00	-748.91	20.6
03:16:2004:13:19:34	-27238	0.00	-748.91	20.6
03:16:2004:13:20:04	-27238	0.00	-748.91	20.6
03:16:2004:13:20:34	-27238	0.00	-748.91	20.6
03:16:2004:13:21:04	-27238	0.00	-748.91	20.6
03:16:2004:13:21:34	-27238	0.00	-748.91	20.6
03:16:2004:13:22:04	-27238	0.00	-748.91	20.6
03:16:2004:13:22:34	-27238	0.00	-748.91	20.6
03:16:2004:13:23:04	-27238	0.00	-748.91	20.6
03:16:2004:13:23:34	-27238	0.00	-748.91	20.6
03:16:2004:13:24:04	-27238	0.00	-748.91	20.6
03:16:2004:13:24:34	-27238	0.00	-748.91	20.6
03:16:2004:13:25:04	-27238	0.00	-748.91	20.6
03:16:2004:13:25:34	-27238	0.00	-748.91	20.6
03:16:2004:13:26:04	-27238	0.00	-748.91	20.6
03:16:2004:13:26:34	-27238	0.00	-748.91	20.6
03:16:2004:13:27:04	-27238	0.00	-748.91	20.6
03:16:2004:13:27:34	-27238	0.00	-748.91	20.6
03:16:2004:13:28:04	-27238	0.00	-748.91	20.6
03:16:2004:13:28:34	-27238	0.00	-748.91	20.6
03:16:2004:13:29:04	-27238	0.00	-748.91	20.6
03:16:2004:13:29:34	-27238	0.00	-748.91	20.6
03:16:2004:13:30:05	-27238	0.00	-748.91	20.6
03:16:2004:13:30:35	-27238	0.00	-748.91	20.6
03:16:2004:13:31:05	-27238	0.00	-748.91	20.6
03:16:2004:13:31:35	-27238	0.00	-748.91	20.6
03:16:2004:13:32:05	-27238	0.00	-748.91	20.6
03:16:2004:13:32:35	-27238	0.00	-748.91	20.6
03:16:2004:13:33:05	-27238	0.00	-748.91	20.6
03:16:2004:13:33:35	-27238	0.00	-748.91	20.6
03:16:2004:13:34:05	-27238	0.00	-748.91	20.6
03:16:2004:13:34:35	-27238	0.00	-748.91	20.6
03:16:2004:13:35:05	-27238	0.00	-748.91	20.6
03:16:2004:13:35:35	-27238	0.00	-748.91	20.6
03:16:2004:13:36:05	-27238	0.00	-748.91	20.6

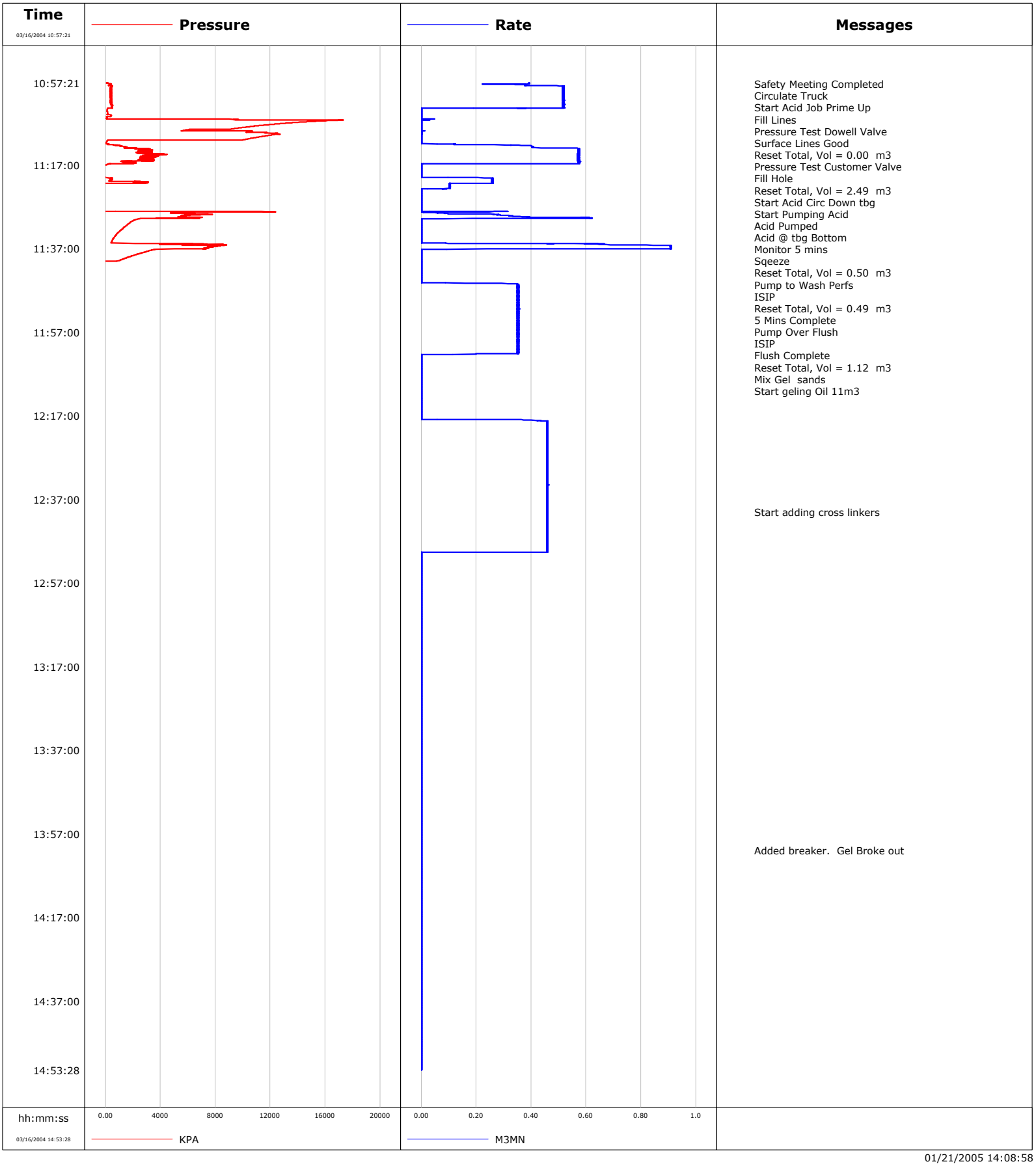
Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:16:2004:13:36:35	-27238	0.00	-748.91	20.6
03:16:2004:13:37:05	-27238	0.00	-748.91	20.6
03:16:2004:13:37:35	-27238	0.00	-748.91	20.6
03:16:2004:13:38:05	-27238	0.00	-748.91	20.6
03:16:2004:13:38:35	-27238	0.00	-748.91	20.6
03:16:2004:13:39:05	-27238	0.00	-748.91	20.6
03:16:2004:13:39:35	-27238	0.00	-748.91	20.6
03:16:2004:13:40:05	-27238	0.00	-748.91	20.6
03:16:2004:13:40:35	-27238	0.00	-748.91	20.6
03:16:2004:13:41:05	-27238	0.00	-748.91	20.6
03:16:2004:13:41:36	-27238	0.00	-748.91	20.6
03:16:2004:13:42:06	-27238	0.00	-748.91	20.6
03:16:2004:13:42:36	-27238	0.00	-748.91	20.6
03:16:2004:13:43:06	-27238	0.00	-748.91	20.6
03:16:2004:13:43:36	-27238	0.00	-748.91	20.6
03:16:2004:13:44:06	-27238	0.00	-748.91	20.6
03:16:2004:13:44:36	-27238	0.00	-748.91	20.6
03:16:2004:13:45:06	-27238	0.00	-748.91	20.6
03:16:2004:13:45:36	-27238	0.00	-748.91	20.6
03:16:2004:13:46:06	-27238	0.00	-748.91	20.6
03:16:2004:13:46:36	-27238	0.00	-748.91	20.6
03:16:2004:13:47:06	-27238	0.00	-748.91	20.6
03:16:2004:13:47:36	-27238	0.00	-748.91	20.6
03:16:2004:13:48:06	-27238	0.00	-748.91	20.6
03:16:2004:13:48:36	-27238	0.00	-748.91	20.6
03:16:2004:13:49:06	-27238	0.00	-748.91	20.6
03:16:2004:13:49:36	-27238	0.00	-748.91	20.6
03:16:2004:13:50:06	-27238	0.00	-748.91	20.6
03:16:2004:13:50:36	-27238	0.00	-748.91	20.6
03:16:2004:13:51:06	-27238	0.00	-748.91	20.6
03:16:2004:13:51:36	-27238	0.00	-748.91	20.6
03:16:2004:13:52:06	-27238	0.00	-748.91	20.6
03:16:2004:13:52:36	-27238	0.00	-748.91	20.6
03:16:2004:13:53:06	-27238	0.00	-748.91	20.6
03:16:2004:13:53:37	-27238	0.00	-748.91	20.6
03:16:2004:13:54:07	-27238	0.00	-748.91	20.6
03:16:2004:13:54:37	-27238	0.00	-748.91	20.6
03:16:2004:13:55:07	-27238	0.00	-748.91	20.6
03:16:2004:13:55:37	-27238	0.00	-748.91	20.6
03:16:2004:13:56:07	-27238	0.00	-748.91	20.6
03:16:2004:13:56:37	-27238	0.00	-748.91	20.6
03:16:2004:13:57:07	-27238	0.00	-748.91	20.6
03:16:2004:13:57:37	-27238	0.00	-748.91	20.6
03:16:2004:13:58:07	-27238	0.00	-748.91	20.6
03:16:2004:13:58:37	-27238	0.00	-748.91	20.6
03:16:2004:13:59:07	-27238	0.00	-748.91	20.6
03:16:2004:13:59:37	-27238	0.00	-748.91	20.6
03:16:2004:14:00:07	-27238	0.00	-748.91	20.6
03:16:2004:14:00:37	-27238	0.00	-748.91	20.6
03:16:2004:14:00:54	Added breaker. Gel Broke out			
03:16:2004:14:00:54	-27238	0.00	-748.91	20.6
03:16:2004:14:01:07	-27238	0.00	-748.91	20.6
03:16:2004:14:01:37	-27238	0.00	-748.91	20.6
03:16:2004:14:02:07	-27238	0.00	-748.91	20.6
03:16:2004:14:02:37	-27238	0.00	-748.91	20.6
03:16:2004:14:03:07	-27238	0.00	-748.91	20.6
03:16:2004:14:03:37	-27238	0.00	-748.91	20.6
03:16:2004:14:04:07	-27238	0.00	-748.91	20.6
03:16:2004:14:04:38	-27238	0.00	-748.91	20.6
03:16:2004:14:05:08	-27238	0.00	-748.91	20.6
03:16:2004:14:05:38	-27238	0.00	-748.91	20.6
03:16:2004:14:06:08	-27238	0.00	-748.91	20.6
03:16:2004:14:06:38	-27238	0.00	-748.91	20.6

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:16:2004:14:07:08	-27238	0.00	-748.91	20.6
03:16:2004:14:07:38	-27238	0.00	-748.91	20.6
03:16:2004:14:08:08	-27238	0.00	-748.91	20.6
03:16:2004:14:08:38	-27238	0.00	-748.91	20.6
03:16:2004:14:09:08	-27238	0.00	-748.91	20.6
03:16:2004:14:09:38	-27238	0.00	-748.91	20.6
03:16:2004:14:10:08	-27238	0.00	-748.91	20.6
03:16:2004:14:10:38	-27238	0.00	-748.91	20.6
03:16:2004:14:11:08	-27238	0.00	-748.91	20.6
03:16:2004:14:11:38	-27238	0.00	-748.91	20.6
03:16:2004:14:12:08	-27238	0.00	-748.91	20.6
03:16:2004:14:12:38	-27238	0.00	-748.91	20.6
03:16:2004:14:13:08	-27238	0.00	-748.91	20.6
03:16:2004:14:13:38	-27238	0.00	-748.91	20.6
03:16:2004:14:14:08	-27238	0.00	-748.91	20.6
03:16:2004:14:14:38	-27238	0.00	-748.91	20.6
03:16:2004:14:15:08	-27238	0.00	-748.91	20.6
03:16:2004:14:15:38	-27238	0.00	-748.91	20.6
03:16:2004:14:16:08	-27238	0.00	-748.91	20.6
03:16:2004:14:16:39	-27238	0.00	-748.91	20.6
03:16:2004:14:17:09	-27238	0.00	-748.91	20.6
03:16:2004:14:17:39	-27238	0.00	-748.91	20.6
03:16:2004:14:18:09	-27238	0.00	-748.91	20.6
03:16:2004:14:18:39	-27238	0.00	-748.91	20.6
03:16:2004:14:19:09	-27238	0.00	-748.91	20.6
03:16:2004:14:19:39	-27238	0.00	-748.91	20.6
03:16:2004:14:20:09	-27238	0.00	-748.91	20.6
03:16:2004:14:20:39	-27238	0.00	-748.91	20.6
03:16:2004:14:21:09	-27238	0.00	-748.91	20.6
03:16:2004:14:21:39	-27238	0.00	-748.91	20.6
03:16:2004:14:22:09	-27238	0.00	-748.91	20.6
03:16:2004:14:22:39	-27238	0.00	-748.91	20.6
03:16:2004:14:23:09	-27238	0.00	-748.91	20.6
03:16:2004:14:23:39	-27238	0.00	-748.91	20.6
03:16:2004:14:24:09	-27238	0.00	-748.91	20.6
03:16:2004:14:24:39	-27238	0.00	-748.91	20.6
03:16:2004:14:25:09	-27238	0.00	-748.91	20.6
03:16:2004:14:25:39	-27238	0.00	-748.91	20.6
03:16:2004:14:26:09	-27238	0.00	-748.91	20.6
03:16:2004:14:26:39	-27238	0.00	-748.91	20.6
03:16:2004:14:27:09	-27238	0.00	-748.91	20.6
03:16:2004:14:27:39	-27238	0.00	-748.91	20.6
03:16:2004:14:28:10	-27238	0.00	-748.91	20.6
03:16:2004:14:28:40	-27238	0.00	-748.91	20.6
03:16:2004:14:29:10	-27238	0.00	-748.91	20.6
03:16:2004:14:29:40	-27238	0.00	-748.91	20.6
03:16:2004:14:30:10	-27238	0.00	-748.91	20.6
03:16:2004:14:30:40	-27238	0.00	-748.91	20.6
03:16:2004:14:31:10	-27238	0.00	-748.91	20.6
03:16:2004:14:31:40	-27238	0.00	-748.91	20.6
03:16:2004:14:32:10	-27238	0.00	-748.91	20.6
03:16:2004:14:32:40	-27238	0.00	-748.91	20.6
03:16:2004:14:33:10	-27238	0.00	-748.91	20.6
03:16:2004:14:33:40	-27238	0.00	-748.91	20.6
03:16:2004:14:34:10	-27238	0.00	-748.91	20.6
03:16:2004:14:34:40	-27238	0.00	-748.91	20.6
03:16:2004:14:35:10	-27238	0.00	-748.91	20.6
03:16:2004:14:35:40	-27238	0.00	-748.91	20.6
03:16:2004:14:36:10	-27238	0.00	-748.91	20.6
03:16:2004:14:36:40	-27238	0.00	-748.91	20.6
03:16:2004:14:37:10	-27238	0.00	-748.91	20.6
03:16:2004:14:37:40	-27238	0.00	-748.91	20.6
03:16:2004:14:38:10	-27238	0.00	-748.91	20.6

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:16:2004:14:38:40	-27238	0.00	-748.91	20.6
03:16:2004:14:39:10	-27238	0.00	-748.91	20.6
03:16:2004:14:39:41	-27238	0.00	-748.91	20.6
03:16:2004:14:40:11	-27238	0.00	-748.91	20.6
03:16:2004:14:40:41	-27238	0.00	-748.91	20.6
03:16:2004:14:41:11	-27238	0.00	-748.91	20.6
03:16:2004:14:41:41	-27238	0.00	-748.91	20.6
03:16:2004:14:42:11	-27238	0.00	-748.91	20.6
03:16:2004:14:42:41	-27238	0.00	-748.91	20.6
03:16:2004:14:43:11	-27238	0.00	-748.91	20.6
03:16:2004:14:43:41	-27238	0.00	-748.91	20.6
03:16:2004:14:44:11	-27238	0.00	-748.91	20.6
03:16:2004:14:44:41	-27238	0.00	-748.91	20.6
03:16:2004:14:45:11	-27238	0.00	-748.91	20.6
03:16:2004:14:45:41	-27238	0.00	-748.91	20.6
03:16:2004:14:46:11	-27238	0.00	-748.91	20.6
03:16:2004:14:46:41	-27238	0.00	-748.91	20.6
03:16:2004:14:47:11	-27238	0.00	-748.91	20.6
03:16:2004:14:47:41	-27238	0.00	-748.91	20.6
03:16:2004:14:48:11	-27238	0.00	-748.91	20.6
03:16:2004:14:48:41	-27238	0.00	-748.91	20.6
03:16:2004:14:49:11	-27238	0.00	-748.91	20.6
03:16:2004:14:49:41	-27238	0.00	-748.91	20.6
03:16:2004:14:50:11	-27238	0.00	-748.91	20.6
03:16:2004:14:50:41	-27238	0.00	-748.91	20.6
03:16:2004:14:51:12	-27238	0.00	-748.91	20.6
03:16:2004:14:51:42	-27238	0.00	-748.91	20.6
03:16:2004:14:52:12	-27238	0.00	-748.91	20.6
03:16:2004:14:52:42	-27238	0.00	-748.91	20.6
03:16:2004:14:53:12	-27238	0.00	-748.91	20.6

Fracturing Job Report

Well	Flatbay 1 - Frac	**Client**	Vulcan
Field		**SIR No.**	2203840304
Engineer	Kevin Law	**Job Type**	Frac
Country	Canada	**Job Date**	03-16-2004



Appendix - XII

Schlumberger Frac Job Report
March 26th, 2004

Schlumberger

Service Order

2005-Jan-20

Customer	Person Taking Call	Dowell Location	OrderDate	Job Number
VULCAN MINERALS INC.	Burgess, Lara	Dartmouth, NS	2004-Mar-26	**2203840305**

Well Name and Number	Legal Location	Field	County	State/Province
Flat Bay 1				Newfoundland

Well Master:	API / UWI:
0630581738	

Rig Name	Well Age	Sales Engineer	Job Type
Petro Drilling Co.	New	Rieger, Bruce	Frac,All YF "GO"

Time Well Ready:	Deviation	Bit Size	Well MD	Well TVD	BHP	BHST	BHCT
3/26/2004 9:00 AM	°	mm	230 m	286 m	kPa	11 °C	25 °C

Treat Down	Packer Type	Packer Depth	WellHead Connection	HHP on Location	Max AllowedPressure	Max Allowed AnnPressure
Tubing	None	m	2 3/8" swage		14000	14000

Casing

Depth, m	Size, mm	Weight, kg/m	Grade	Thread
239.66	114	14.15	J55	8rd

Tubing

Depth,	Size, mm	Weight, kg/m	Grade	Thread
180	60	7	J55	N/A

Perforated Intervals

Top, m	Bottom, m	spm	No. of Shots	Total Interval
192	197	13	65	m
				Diameter
				mm

Services Instructions:

Supply men Equipment and materials to Fracture a 5m zone @192m to 197m using a Gelled Oil GO III Frac system.

Extra Equipment:

Expected On Location: 3/26/2004 9:00 AM **Ready To Pump:** 3/26/2004 12:00 PM

Contact	Voice	Mobile	FAX	Notes
Ed Weiterman	709 689 0075			
Mark Stocking	519 872 0335			

Notes:

Directions:

Approx 147 km from Port aux Basque turn Left on to road for Flat Bay. Drive 7 km then turn Right onto lease road.

Other Notes:

Comments:

Fluid Systems:

YF GO III

15m3 Frac Oil+3600kg 20/40 sand +180 litreJ452 + 167 litre J601 + 35litre J602+35 kgJ059 + 8litreW60

Density:		kg/m³	*Thickening Time:*		
Yield:		ft³/sk	*Viscosity:*		cp
H2O Mix:	0		*Break Time:*		
H2O:	0	m³	*Eq. Sack Weight:*	0	lb
			Total Blend:	0	sacks

Dowell Code	Conc/ Amount		Total Quantity
W60	8	litre	8
J059	35	kg	35
J602	35	litre	35
J601	167	litre	167
J452	180	litre	180

Schlumberger

Stimulation Service Report

Customer	Job Number
VULCAN MINERALS INC.	2203840305

Well	Location (legal)	Schlumberger Location	Job Start
Flat Bay 1		Dartmouth, NS	2004-Mar-26

Field	Formation Name/Type	Deviation	BitSize:	Well MD	Well TVD
		°	m	230 m	286 m

County	State/Province	BHP	BHST	BHCT	Pore Pres Gradient
	Newfoundland	kPa	11 °C	25 °C	24 kPa/m

Well Maste	API / UW
0630581738	

Rig Name	Drilled For	Service Via
Petro Drilling Co.	Oil	

Offshore Zone	Well Class	Well Type
	New	Development

Primary Treating Fluid	Polymer Loading	Fluid Density
YFGOIII	lb/1000gal	kg/m³

Service Line	Job Type
Fracturing	Frac,All YF "GO"

Max. Allowed Tubing Pressure	Max. Allowed Ann. Pressure	WellHead Connection
14000 kPa	14000 kPa	2 3/8" swage

Service Instructions

Supply men Equipment and materials to Fracture a 5m zone @192m to 197m using a Gelled Oil GO III Frac system.

Casing/Liner

Depth, m	Size, mm	Weight, kg/m	Grade	Thread
239.66	114	14.15	J55	8rd

Tubing/Drill Pipe

Depth,	Size, mm	Weight, kg/m	Grade	Thread
180	60	7	J55	N/A

Perforations/Open Hole

Top, m	Bottom, m	spm	No. of Shots	Total Interval
192	197	13	65	m
				Diameter
				mm

Treat Down	Displacement	Packer Type	Packer Depth
Tubing	0.4 m³	None	m

Job Scheduled For:	Arrived on Location:	Leave Location:
3/26/2004 9:00	2004-Mar-26 9:00	2004-Mar-26 18:00

Tubing Vol.	CasingVol.	AnnularVol.	OpenHoleVol
0.346 m³	2.03 m³	1.5 m³	1.5 m³

Date	Time (24 hr clock)	Fluid Type	Prop Type KPA	Rates: Gas scm/m	Rates: Fluid m³/m	Volumes: Incr. m³	Volumes: Cum. m³	Pressures: Casing kPa	Pressures: Tubing kPa	Message

Post Job Summary

Average Injection Rates, m³/m

Fluid	N2	CO2	Maximum Rate
0.9			0.96

Volume of Fluid Injected, m³

Clean Fluid	Acid	Oil	CO2	N2 (scm)
13				

Treating Pressure Summary, kPa

Breakdown	Maximum	Final	Average	ISIP	15 Min. ISIP
	8711	8711	7500	5113	4166

Quantity of & placed, kg

Total Injected	Total Ordered/Designed
3,680	

N2 Percent	CO2 Percent	Designed Fluid Volume	Displacement	Slurry Volume	Pad Volume	Percent Pad
%	%	5500 l	0.4 m³	5.3 m³	7200 l	%

Customer or Authorized Representative	Schlumberger Supervisor	Number of Stages	Fracture Gradient	
Stocking, Mark	Kevin Law		kPa/m	☑ Job Completed ☐ Screen Out

Schlumberger — Service Quality Evaluation

Stimulation - Acidizing, Fracturing & Other

Client:	VULCAN MINERALS INC.	**Service Order #:**	2203840305 SQE #: 1
Field:		**Date:**	2004-Mar-30
Rig:	Petro Drilling Co.	**Operating Time:**	4.00 hrs.
Well:	Flat Bay 1	**Client Rep:**	Stocking, Mark
Service Line:	Fracturing	**Schlumberger Engineer:**	Kevin Law
Job Type:	Frac,All YF "GO"	**Schlumberger FSM:**	Burgess, Lara

Main Objective*: Perform a YF GO III Frac.

To be completed by Company Rep. Please answer Y (Yes) or N (No) and add any comments below.

		Score	Yes / No	Result
1	**HSE**			
1a	Free of lost time injury and full compliance with SLB and location specific HSE practice.	5	☑ Yes ☐ No	5
1b	Free of environmental spill or non-compliant discharge.	5	☑ Yes ☐ No	5
			Sub-total	100%
2	**Design / Preparation**			
2a	Program including job simulation (CADE) and pumping schedule on location, discussed and agreed upon with client	3	☑ Yes ☐ No	3
2b	Equipment maintenance schedule completed / Green Tagged.	2	☑ Yes ☐ No	2
2c	All materials and equipment required for job / contingency checked and on location.	2	☑ Yes ☐ No	2
2d	Safety / pre-job meeting conducted with all involved present.	2	☑ Yes ☐ No	2
			Sub-total	100%
3	**Execution**			
3a	Job completed with no lost time	3	☑ Yes ☐ No	3
3b	Equipment pressure tested successfully	2	☑ Yes ☐ No	2
3c	All key parameters monitored and recorded accurately (Pressure, Rate, Density).	2	☑ Yes ☐ No	2
3d	Personnel performed as per expectations.	2	☑ Yes ☐ No	2
3e	Equipment performed as per expectations.	2	☑ Yes ☐ No	2
			Sub-total	100%
4	**Evaluation**			
4a	Main job objective achieved with no consequential non productive time	10	☑ Yes ☐ No	10
			Sub-total	100%

Total 100%

Comments: (Please include a brief explanation for a "NO" response and summarise any innovations attempted on this well.)

Client:	**Schlumberger:**
	Job went as per program. Thanks. Kevin Law & Crew
Client Signature:	**Schlumberger Signature:**

Schlumberger

Job Date: 03-26-2004

Customer:	Vulcan Minerals
District:	Dartmouth
Representative:	Mark Stocking
DS Supervisor:	Kevin Law
Well:	Flat Bay # 1

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:26:2004:13:21:42	-126	0.00	289.62	0.0
03:26:2004:13:21:59	Safety Meeting			
03:26:2004:13:21:59	-126	0.00	289.62	0.0
03:26:2004:13:22:12	-126	0.00	289.62	0.0
03:26:2004:13:22:42	-126	0.00	289.62	0.0
03:26:2004:13:23:12	-126	0.00	289.62	0.0
03:26:2004:13:23:42	-63	0.15	289.62	0.0
03:26:2004:13:24:12	0	0.08	288.71	0.1
03:26:2004:13:24:42	0	0.24	288.71	0.2
03:26:2004:13:25:13	0	0.26	288.71	0.3
03:26:2004:13:25:53	0	0.37	288.71	0.4
03:26:2004:13:26:24	-126	0.00	287.79	0.5
03:26:2004:13:26:54	0	0.00	288.71	0.5
03:26:2004:13:27:24	0	0.00	288.71	0.5
03:26:2004:13:27:54	0	0.00	288.71	0.5
03:26:2004:13:28:24	-32	0.00	-748.91	0.5
03:26:2004:13:28:54	0	0.00	288.71	0.5
03:26:2004:13:29:24	0	0.00	288.71	0.5
03:26:2004:13:29:45	Pressure Test Lines			
03:26:2004:13:29:45	0	0.00	830.10	0.5
03:26:2004:13:29:54	0	0.00	830.10	0.5
03:26:2004:13:30:24	126	0.00	830.83	0.5
03:26:2004:13:30:54	15276	0.00	830.83	0.5
03:26:2004:13:31:24	16854	0.00	830.83	0.5
03:26:2004:13:31:54	16444	0.00	830.83	0.5
03:26:2004:13:32:24	16317	0.00	830.83	0.5
03:26:2004:13:32:52	Test good			
03:26:2004:13:32:52	16223	0.00	830.83	0.5
03:26:2004:13:32:54	16223	0.00	830.83	0.5
03:26:2004:13:33:24	1736	0.00	830.83	0.5
03:26:2004:13:33:45	Start Injection Test			
03:26:2004:13:33:45	6533	0.23	830.83	0.5
03:26:2004:13:33:47	Reset Total, Vol = 0.53 m3			
03:26:2004:13:33:47	6091	0.27	830.83	0.5
03:26:2004:13:33:54	6817	0.39	830.83	0.0
03:26:2004:13:34:24	2115	0.00	305.71	0.3
03:26:2004:13:34:54	1799	0.00	305.71	0.3
03:26:2004:13:35:23	Injection Rate Established			
03:26:2004:13:35:23	1767	0.00	305.71	0.3
03:26:2004:13:35:24	1767	0.00	305.71	0.3
03:26:2004:13:35:32	Reset Total, Vol = 0.32 m3			
03:26:2004:13:35:32	1767	0.00	305.71	0.3
03:26:2004:13:35:54	1736	0.00	305.71	0.0
03:26:2004:13:36:24	1199	0.00	305.71	0.0
03:26:2004:13:36:54	-63	0.00	305.71	0.0
03:26:2004:13:37:24	-63	0.00	305.71	0.0
03:26:2004:13:37:55	-32	0.00	305.71	0.0
03:26:2004:13:38:25	-32	0.00	305.71	0.0
03:26:2004:13:38:55	-32	0.00	305.71	0.0
03:26:2004:13:39:25	-32	0.00	305.71	0.0
03:26:2004:13:39:55	-32	0.00	305.71	0.0
03:26:2004:13:40:25	-32	0.00	305.71	0.0
03:26:2004:13:40:55	-63	0.00	305.71	0.0
03:26:2004:13:41:25	-63	0.00	305.71	0.0
03:26:2004:13:41:55	-63	0.00	305.71	0.0
03:26:2004:13:42:25	-63	0.00	305.71	0.0
03:26:2004:13:42:55	-32	0.00	305.71	0.0

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:26:2004:13:43:55	-32	0.00	808.89	0.0
03:26:2004:13:44:25	63	0.55	827.17	0.1
03:26:2004:13:44:55	158	0.61	829.36	0.4
03:26:2004:13:45:25	158	0.61	827.90	0.7
03:26:2004:13:45:55	158	0.61	827.17	1.1
03:26:2004:13:46:25	158	0.61	826.44	1.4
03:26:2004:13:46:55	158	0.61	826.44	1.7
03:26:2004:13:47:25	158	0.61	826.44	2.0
03:26:2004:13:47:55	158	0.61	826.44	2.3
03:26:2004:13:48:25	158	0.61	826.44	2.6
03:26:2004:13:48:55	158	0.61	826.44	2.9
03:26:2004:13:49:26	158	0.61	826.44	3.2
03:26:2004:13:49:56	126	0.62	826.44	3.5
03:26:2004:13:50:26	126	0.61	826.44	3.8
03:26:2004:13:50:56	126	0.61	826.44	4.1
03:26:2004:13:51:26	158	0.61	825.71	4.4
03:26:2004:13:51:56	158	0.61	826.44	4.7
03:26:2004:13:52:26	158	0.62	826.44	5.0
03:26:2004:13:52:56	158	0.61	825.71	5.3
03:26:2004:13:53:26	158	0.62	826.44	5.6
03:26:2004:13:53:56	158	0.62	825.71	6.0
03:26:2004:13:54:26	158	0.61	826.44	6.3
03:26:2004:13:54:56	126	0.61	826.44	6.6
03:26:2004:13:55:26	158	0.62	826.44	6.9
03:26:2004:13:55:56	158	0.61	826.44	7.2
03:26:2004:13:56:26	158	0.62	826.44	7.5
03:26:2004:13:56:56	126	0.62	826.44	7.8
03:26:2004:13:57:26	126	0.61	826.44	8.1
03:26:2004:13:57:56	126	0.62	826.44	8.4
03:26:2004:13:58:26	126	0.62	826.44	8.7
03:26:2004:13:58:56	158	0.61	826.44	9.0
03:26:2004:13:59:26	158	0.61	826.44	9.3
03:26:2004:13:59:56	158	0.61	826.44	9.6
03:26:2004:14:00:26	158	0.61	827.17	9.9
03:26:2004:14:00:57	126	0.61	827.17	10.2
03:26:2004:14:01:27	126	0.62	827.17	10.6
03:26:2004:14:01:57	126	0.61	826.44	10.9
03:26:2004:14:02:27	126	0.61	826.44	11.2
03:26:2004:14:02:57	158	0.62	827.17	11.5
03:26:2004:14:03:27	158	0.62	826.44	11.8
03:26:2004:14:03:57	158	0.61	827.17	12.1
03:26:2004:14:04:27	158	0.61	826.44	12.4
03:26:2004:14:04:57	126	0.61	827.17	12.7
03:26:2004:14:05:27	126	0.61	827.17	13.0
03:26:2004:14:05:57	126	0.62	827.17	13.3
03:26:2004:14:06:27	158	0.61	827.17	13.6
03:26:2004:14:06:57	158	0.62	827.17	13.9
03:26:2004:14:07:27	158	0.62	827.17	14.2
03:26:2004:14:07:57	126	0.62	827.17	14.5
03:26:2004:14:08:27	126	0.62	827.17	14.8
03:26:2004:14:08:57	158	0.61	827.17	15.1
03:26:2004:14:09:27	126	0.62	827.17	15.4
03:26:2004:14:09:57	126	0.61	827.17	15.8
03:26:2004:14:10:27	158	0.62	827.17	16.1
03:26:2004:14:10:57	126	0.61	827.17	16.4
03:26:2004:14:11:27	126	0.61	827.17	16.7
03:26:2004:14:11:57	126	0.61	827.17	17.0
03:26:2004:14:12:28	126	0.62	827.17	17.3
03:26:2004:14:12:58	126	0.62	827.17	17.6
03:26:2004:14:13:28	158	0.61	827.17	17.9
03:26:2004:14:13:58	126	0.62	849.84	18.2
03:26:2004:14:14:28	126	0.61	827.90	18.5
03:26:2004:14:14:58	126	0.62	832.29	18.8

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:26:2004:14:15:28	126	0.61	831.56	19.1
03:26:2004:14:15:58	126	0.62	835.22	19.4
03:26:2004:14:16:28	126	0.62	833.75	19.7
03:26:2004:14:16:58	126	0.62	828.63	20.1
03:26:2004:14:17:28	126	0.61	827.90	20.4
03:26:2004:14:17:58	126	0.62	827.90	20.7
03:26:2004:14:18:28	126	0.61	827.90	21.0
03:26:2004:14:18:58	126	0.61	827.90	21.3
03:26:2004:14:19:28	126	0.61	827.90	21.6
03:26:2004:14:19:58	126	0.61	828.63	21.9
03:26:2004:14:20:28	126	0.62	828.63	22.2
03:26:2004:14:20:58	126	0.62	827.90	22.5
03:26:2004:14:21:28	126	0.62	827.90	22.8
03:26:2004:14:21:58	126	0.62	827.90	23.1
03:26:2004:14:22:28	126	0.61	827.90	23.4
03:26:2004:14:22:58	126	0.61	827.90	23.7
03:26:2004:14:23:28	126	0.62	827.90	24.0
03:26:2004:14:23:59	126	0.61	827.90	24.3
03:26:2004:14:24:29	126	0.62	842.53	24.7
03:26:2004:14:24:59	158	0.61	843.26	25.0
03:26:2004:14:25:29	126	0.61	829.36	25.3
03:26:2004:14:25:59	158	0.62	828.63	25.6
03:26:2004:14:26:29	126	0.62	828.63	25.9
03:26:2004:14:26:59	126	0.62	829.36	26.2
03:26:2004:14:27:29	126	0.62	829.36	26.5
03:26:2004:14:27:59	126	0.61	829.36	26.8
03:26:2004:14:28:29	126	0.62	829.36	27.1
03:26:2004:14:28:59	126	0.61	829.36	27.4
03:26:2004:14:29:29	126	0.62	828.63	27.7
03:26:2004:14:29:59	126	0.61	828.63	28.0
03:26:2004:14:30:29	126	0.62	828.63	28.3
03:26:2004:14:30:59	126	0.62	828.63	28.6
03:26:2004:14:31:29	126	0.62	828.63	28.9
03:26:2004:14:31:59	126	0.61	828.63	29.2
03:26:2004:14:32:29	126	0.61	828.63	29.6
03:26:2004:14:32:59	126	0.62	828.63	29.9
03:26:2004:14:33:29	126	0.61	828.63	30.2
03:26:2004:14:33:59	126	0.61	828.63	30.5
03:26:2004:14:34:29	126	0.61	828.63	30.8
03:26:2004:14:34:59	252	0.61	828.63	31.1
03:26:2004:14:35:30	410	0.62	828.63	31.4
03:26:2004:14:36:00	442	0.61	828.63	31.7
03:26:2004:14:36:30	442	0.61	828.63	32.0
03:26:2004:14:37:00	442	0.61	828.63	32.3
03:26:2004:14:37:30	347	0.62	829.36	32.6
03:26:2004:14:38:00	442	0.61	828.63	32.9
03:26:2004:14:38:30	410	0.61	828.63	33.2
03:26:2004:14:39:00	379	0.61	829.36	33.5
03:26:2004:14:39:30	410	0.61	828.63	33.8
03:26:2004:14:40:00	442	0.61	828.63	34.2
03:26:2004:14:40:30	442	0.61	828.63	34.5
03:26:2004:14:41:00	-32	0.00	829.36	34.6
03:26:2004:14:41:30	-32	0.00	829.36	34.6
03:26:2004:14:42:00	-32	0.00	829.36	34.6
03:26:2004:14:42:30	-32	0.00	827.90	34.6
03:26:2004:14:43:00	-32	0.00	827.90	34.6
03:26:2004:14:43:30	-32	0.00	827.17	34.6
03:26:2004:14:44:00	-32	0.00	827.17	34.6
03:26:2004:14:44:30	-32	0.00	822.78	34.6
03:26:2004:14:45:00	-32	0.00	825.71	34.6
03:26:2004:14:45:30	-32	0.00	825.71	34.6
03:26:2004:14:46:00	-32	0.00	825.71	34.6
03:26:2004:14:46:30	-32	0.00	825.71	34.6

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:26:2004:14:47:00	-32	0.00	825.71	34.6
03:26:2004:14:47:31	-32	0.00	827.17	34.6
03:26:2004:14:48:01	-32	0.00	827.17	34.6
03:26:2004:14:48:31	-32	0.00	827.90	34.6
03:26:2004:14:49:01	-32	0.00	826.44	34.6
03:26:2004:14:49:31	-32	0.00	825.71	34.6
03:26:2004:14:50:01	-32	0.00	825.71	34.6
03:26:2004:14:50:31	-32	0.00	824.98	34.6
03:26:2004:14:51:01	-32	0.00	824.98	34.6
03:26:2004:14:51:31	-32	0.00	824.98	34.6
03:26:2004:14:52:01	-32	0.00	824.98	34.6
03:26:2004:14:52:31	-32	0.00	825.71	34.6
03:26:2004:14:53:01	-32	0.00	830.83	34.6
03:26:2004:14:53:31	347	0.60	832.29	34.8
03:26:2004:14:54:01	505	0.64	832.29	35.1
03:26:2004:14:54:31	537	0.64	831.56	35.4
03:26:2004:14:55:01	537	0.64	832.29	35.7
03:26:2004:14:55:31	505	0.64	831.56	36.0
03:26:2004:14:56:01	473	0.64	831.56	36.4
03:26:2004:14:56:31	473	0.65	831.56	36.7
03:26:2004:14:57:01	505	0.64	833.02	37.0
03:26:2004:14:57:31	410	0.64	866.66	37.3
03:26:2004:14:58:01	473	0.64	903.96	37.6
03:26:2004:14:58:31	505	0.64	939.80	38.0
03:26:2004:14:59:02	442	0.64	973.44	38.3
03:26:2004:14:59:32	473	0.64	1009.28	38.6
03:26:2004:15:00:02	473	0.64	1066.33	38.9
03:26:2004:15:00:32	473	0.64	1092.66	39.3
03:26:2004:15:01:02	473	0.64	1108.75	39.6
03:26:2004:15:01:32	505	0.64	1127.76	39.9
03:26:2004:15:02:02	537	0.64	1165.79	40.2
03:26:2004:15:02:32	537	0.64	1176.76	40.5
03:26:2004:15:03:02	631	0.64	1179.69	40.9
03:26:2004:15:03:32	442	0.65	842.53	41.2
03:26:2004:15:04:02	473	0.64	854.23	41.5
03:26:2004:15:04:32	473	0.65	860.81	41.8
03:26:2004:15:05:02	410	0.65	861.54	42.2
03:26:2004:15:05:32	473	0.65	862.28	42.5
03:26:2004:15:06:02	379	0.64	861.54	42.8
03:26:2004:15:06:32	410	0.64	898.84	43.1
03:26:2004:15:07:02	473	0.65	999.04	43.4
03:26:2004:15:07:32	473	0.64	1072.18	43.8
03:26:2004:15:08:02	473	0.64	1061.94	44.1
03:26:2004:15:08:32	537	0.64	1072.91	44.4
03:26:2004:15:09:02	505	0.64	1099.97	44.7
03:26:2004:15:09:32	537	0.64	1107.28	45.1
03:26:2004:15:10:02	505	0.64	1116.06	45.4
03:26:2004:15:10:33	568	0.64	1121.18	45.7
03:26:2004:15:11:03	505	0.64	1127.03	46.0
03:26:2004:15:11:33	505	0.64	1135.81	46.4
03:26:2004:15:12:03	537	0.64	1135.07	46.7
03:26:2004:15:12:33	600	0.64	1138.00	47.0
03:26:2004:15:13:03	568	0.64	1133.61	47.3
03:26:2004:15:13:33	568	0.64	1135.81	47.6
03:26:2004:15:14:03	505	0.64	1133.61	48.0
03:26:2004:15:14:33	537	0.64	1138.00	48.3
03:26:2004:15:15:03	600	0.64	1134.34	48.6
03:26:2004:15:15:33	600	0.64	1159.21	48.9
03:26:2004:15:16:03	631	0.64	1264.53	49.2
03:26:2004:15:16:33	600	0.64	1294.51	49.6
03:26:2004:15:17:03	600	0.64	1275.50	49.9
03:26:2004:15:17:33	663	0.64	1284.27	50.2
03:26:2004:15:18:03	694	0.64	1288.66	50.5

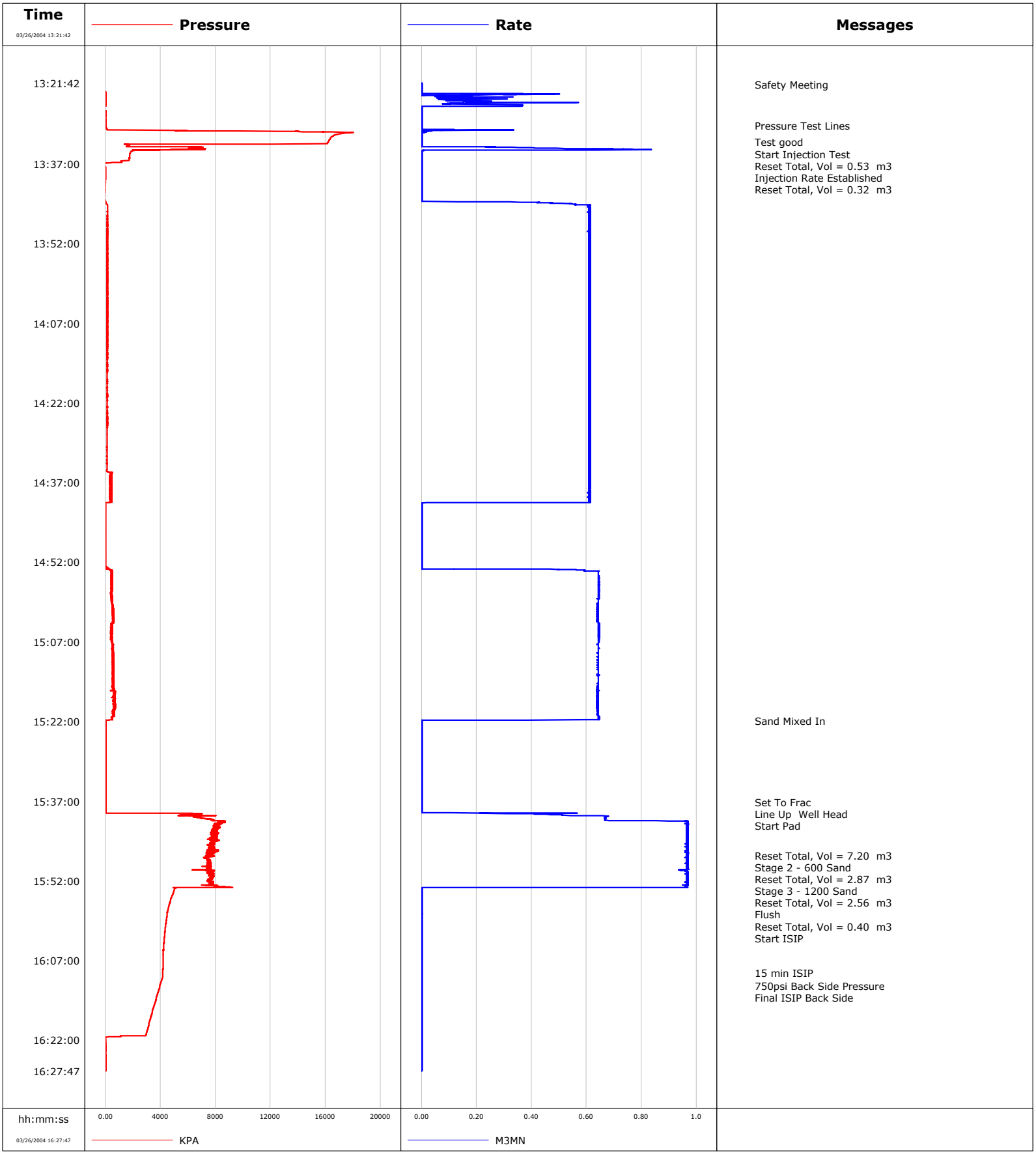
Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:26:2004:15:18:33	694	0.64	1333.27	50.9
03:26:2004:15:19:03	631	0.64	1328.89	51.2
03:26:2004:15:19:33	694	0.64	1334.74	51.5
03:26:2004:15:20:03	631	0.64	1193.58	51.8
03:26:2004:15:20:33	631	0.64	1197.24	52.1
03:26:2004:15:21:03	568	0.65	871.78	52.5
03:26:2004:15:21:33	442	0.64	833.75	52.8
03:26:2004:15:21:56	Sand Mixed In			
03:26:2004:15:21:56	0	0.00	833.75	52.9
03:26:2004:15:22:04	0	0.00	833.75	52.9
03:26:2004:15:22:34	0	0.00	833.75	52.9
03:26:2004:15:23:04	32	0.00	833.75	52.9
03:26:2004:15:23:34	0	0.00	833.75	52.9
03:26:2004:15:24:04	32	0.00	833.75	52.9
03:26:2004:15:24:34	32	0.00	833.75	52.9
03:26:2004:15:25:04	32	0.00	833.75	52.9
03:26:2004:15:25:34	32	0.00	833.75	52.9
03:26:2004:15:26:04	32	0.00	833.75	52.9
03:26:2004:15:26:34	32	0.00	833.75	52.9
03:26:2004:15:27:04	32	0.00	833.75	52.9
03:26:2004:15:27:34	32	0.00	833.02	52.9
03:26:2004:15:28:04	32	0.00	833.75	52.9
03:26:2004:15:28:34	32	0.00	833.02	52.9
03:26:2004:15:29:04	32	0.00	833.02	52.9
03:26:2004:15:29:34	32	0.00	833.02	52.9
03:26:2004:15:30:04	32	0.00	833.02	52.9
03:26:2004:15:30:34	32	0.00	833.02	52.9
03:26:2004:15:31:04	32	0.00	833.02	52.9
03:26:2004:15:31:34	32	0.00	833.02	52.9
03:26:2004:15:32:04	32	0.00	833.02	52.9
03:26:2004:15:32:34	32	0.00	833.02	52.9
03:26:2004:15:33:04	32	0.00	833.02	52.9
03:26:2004:15:33:35	32	0.00	833.02	52.9
03:26:2004:15:34:05	32	0.00	833.02	52.9
03:26:2004:15:34:35	32	0.00	833.02	52.9
03:26:2004:15:35:05	32	0.00	833.02	52.9
03:26:2004:15:35:35	32	0.00	833.02	52.9
03:26:2004:15:36:05	32	0.00	833.02	52.9
03:26:2004:15:36:35	32	0.00	833.02	52.9
03:26:2004:15:37:05	32	0.00	833.02	52.9
03:26:2004:15:37:12	Set To Frac			
03:26:2004:15:37:12	32	0.00	833.02	52.9
03:26:2004:15:37:30	Line Up Well Head			
03:26:2004:15:37:30	32	0.00	833.02	52.9
03:26:2004:15:37:35	32	0.00	833.02	0.0
03:26:2004:15:38:05	32	0.00	833.02	0.0
03:26:2004:15:38:35	32	0.00	833.02	0.0
03:26:2004:15:38:50	Start Pad			
03:26:2004:15:38:50	32	0.00	833.02	0.0
03:26:2004:15:39:05	32	0.00	831.56	0.0
03:26:2004:15:39:35	5365	0.51	834.48	0.2
03:26:2004:15:40:05	6944	0.67	833.02	0.5
03:26:2004:15:40:35	7922	0.67	834.48	0.8
03:26:2004:15:41:05	8174	0.97	833.02	1.3
03:26:2004:15:41:35	7890	0.97	832.29	1.8
03:26:2004:15:42:05	8269	0.97	831.56	2.2
03:26:2004:15:42:35	8143	0.97	830.83	2.7
03:26:2004:15:43:05	7859	0.97	830.10	3.2
03:26:2004:15:43:35	8080	0.97	830.83	3.7
03:26:2004:15:44:05	7606	0.97	829.36	4.2
03:26:2004:15:44:35	7733	0.97	835.22	4.7
03:26:2004:15:45:06	7827	0.97	834.48	5.2
03:26:2004:15:45:36	7890	0.97	835.22	5.6

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:26:2004:15:46:06	7701	0.97	824.98	6.1
03:26:2004:15:46:36	7512	0.97	829.36	6.6
03:26:2004:15:47:06	7543	0.97	830.83	7.1
03:26:2004:15:47:13	Reset Total, Vol = 7.20 m3			
03:26:2004:15:47:13	7796	0.97	1045.12	7.2
03:26:2004:15:47:15	Stage 2 - 600 Sand			
03:26:2004:15:47:15	7480	0.97	1121.18	0.0
03:26:2004:15:47:36	7259	0.97	1148.97	0.4
03:26:2004:15:48:06	7575	0.97	1151.16	0.9
03:26:2004:15:48:36	7669	0.97	1148.97	1.3
03:26:2004:15:49:06	7543	0.97	1147.51	1.8
03:26:2004:15:49:36	7543	0.97	1143.85	2.3
03:26:2004:15:50:06	7701	0.97	1366.18	2.8
03:26:2004:15:50:11	Reset Total, Vol = 2.87 m3			
03:26:2004:15:50:11	7733	0.97	1367.65	2.9
03:26:2004:15:50:16	Stage 3 - 1200 Sand			
03:26:2004:15:50:16	7606	0.97	1361.80	0.1
03:26:2004:15:50:36	7764	0.97	1360.33	0.4
03:26:2004:15:51:06	7796	0.97	1345.71	0.9
03:26:2004:15:51:36	7733	0.97	1316.45	1.4
03:26:2004:15:52:06	7543	0.97	1309.87	1.9
03:26:2004:15:52:36	7859	0.97	1305.48	2.3
03:26:2004:15:52:50	Reset Total, Vol = 2.56 m3			
03:26:2004:15:52:50	7291	0.97	883.49	2.6
03:26:2004:15:52:57	Flush			
03:26:2004:15:52:57	7890	0.97	838.87	0.1
03:26:2004:15:53:06	8711	0.97	835.22	0.3
03:26:2004:15:53:20	Reset Total, Vol = 0.40 m3			
03:26:2004:15:53:20	5113	0.00	305.71	0.4
03:26:2004:15:53:30	Start ISIP			
03:26:2004:15:53:30	5018	0.00	305.71	0.0
03:26:2004:15:53:36	5018	0.00	305.71	0.0
03:26:2004:15:54:06	4955	0.00	305.71	0.0
03:26:2004:15:54:36	4892	0.00	305.71	0.0
03:26:2004:15:55:06	4829	0.00	305.71	0.0
03:26:2004:15:55:36	4766	0.00	305.71	0.0
03:26:2004:15:56:06	4671	0.00	305.71	0.0
03:26:2004:15:56:37	4640	0.00	305.71	0.0
03:26:2004:15:57:07	4576	0.00	305.71	0.0
03:26:2004:15:57:37	4545	0.00	305.71	0.0
03:26:2004:15:58:07	4513	0.00	305.71	0.0
03:26:2004:15:58:37	4482	0.00	305.71	0.0
03:26:2004:15:59:07	4450	0.00	305.71	0.0
03:26:2004:15:59:37	4419	0.00	305.71	0.0
03:26:2004:16:00:07	4387	0.00	305.71	0.0
03:26:2004:16:00:37	4387	0.00	305.71	0.0
03:26:2004:16:01:07	4355	0.00	305.71	0.0
03:26:2004:16:01:37	4355	0.00	305.71	0.0
03:26:2004:16:02:07	4324	0.00	305.71	0.0
03:26:2004:16:02:37	4292	0.00	305.71	0.0
03:26:2004:16:03:07	4292	0.00	305.71	0.0
03:26:2004:16:03:37	4292	0.00	305.71	0.0
03:26:2004:16:04:07	4261	0.00	305.71	0.0
03:26:2004:16:04:37	4261	0.00	305.71	0.0
03:26:2004:16:05:07	4229	0.00	305.71	0.0
03:26:2004:16:05:37	4229	0.00	305.71	0.0
03:26:2004:16:06:07	4229	0.00	305.71	0.0
03:26:2004:16:06:37	4229	0.00	305.71	0.0
03:26:2004:16:07:07	4198	0.00	305.71	0.0
03:26:2004:16:07:37	4198	0.00	305.71	0.0
03:26:2004:16:08:07	4198	0.00	305.71	0.0
03:26:2004:16:08:38	4198	0.00	305.71	0.0
03:26:2004:16:09:08	4166	0.00	305.71	0.0

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure kPa	Flow Rate m3/min	Density kg/m3	Volume m3
03:26:2004:16:09:16	15 min ISIP			
03:26:2004:16:09:16	4166	0.00	305.71	0.0
03:26:2004:16:09:38	4166	0.00	305.71	0.0
03:26:2004:16:10:08	4166	0.00	305.71	0.0
03:26:2004:16:10:38	4103	0.00	305.71	0.0
03:26:2004:16:11:08	4040	0.00	305.71	0.0
03:26:2004:16:11:38	3977	0.00	305.71	0.0
03:26:2004:16:11:49	750psi Back Side Pressure			
03:26:2004:16:11:49	3977	0.00	305.71	0.0
03:26:2004:16:11:50	Final ISIP Back Side			
03:26:2004:16:11:50	3977	0.00	305.71	0.0
03:26:2004:16:12:08	3945	0.00	305.71	0.0
03:26:2004:16:12:38	3882	0.00	305.71	0.0
03:26:2004:16:13:08	3819	0.00	305.71	0.0
03:26:2004:16:13:38	3756	0.00	305.71	0.0
03:26:2004:16:14:08	3693	0.00	305.71	0.0
03:26:2004:16:14:38	3661	0.00	305.71	0.0
03:26:2004:16:15:08	3598	0.00	305.71	0.0
03:26:2004:16:15:38	3535	0.00	305.71	0.0
03:26:2004:16:16:08	3472	0.00	305.71	0.0
03:26:2004:16:16:38	3409	0.00	305.71	0.0
03:26:2004:16:17:08	3377	0.00	305.71	0.0
03:26:2004:16:17:38	3314	0.00	305.71	0.0
03:26:2004:16:18:08	3251	0.00	305.71	0.0
03:26:2004:16:18:38	3219	0.00	305.71	0.0
03:26:2004:16:19:08	3156	0.00	305.71	0.0
03:26:2004:16:19:38	3093	0.00	305.71	0.0
03:26:2004:16:20:09	3061	0.00	305.71	0.0
03:26:2004:16:20:39	2998	0.00	305.71	0.0
03:26:2004:16:21:09	2935	0.00	305.71	0.0
03:26:2004:16:21:39	-63	0.00	305.71	0.0
03:26:2004:16:22:09	-32	0.00	305.71	0.0
03:26:2004:16:22:39	0	0.00	305.71	0.0
03:26:2004:16:23:09	-32	0.00	305.71	0.0
03:26:2004:16:23:39	0	0.00	305.71	0.0
03:26:2004:16:24:09	-32	0.00	305.71	0.0
03:26:2004:16:24:39	0	0.00	305.71	0.0
03:26:2004:16:25:09	32	0.00	305.71	0.0
03:26:2004:16:25:39	32	0.00	305.71	0.0
03:26:2004:16:26:09	32	0.00	305.71	0.0
03:26:2004:16:26:39	32	0.00	305.71	0.0
03:26:2004:16:27:09	32	0.00	305.71	0.0
03:26:2004:16:27:39	32	0.00	305.71	0.0

Fracturing Job Report

Well	Flat Bay # 1	**Client**	Vulcan Minerals
Field	Flat Bay	**SIR No.**	2203840305
Engineer	Kevin Law	**Job Type**	GO III
Country	Canada	**Job Date**	03-26-2004



Appendix - XIII

Tubing Tally Sheet
Mar 29th, 2004

PIPE TALLY SHEET

							DATE		March 29, 2004	
NAME: Vulcan Minerals Inc. FB #1							**PAGE**	1	of	1
Size	60.3	**mm Wt.**	6.99	**kg/m Gr**	J55	**Cplg**	EUE		**Thread**	

Joint	**Length**	**Joint**	**Length**	**Joint**	**Length**	**Joint**	**Length**	**Joint**	**Length**
1	9.62	11	9.60	21	9.60	31		41	
2	0.33	12	9.60	22	3.00	32		42	
3	9.61	13	9.60	23	2.43	33		43	
4	9.61	14	9.61	24		34		44	
5	9.59	15	9.60	25		35		45	
6	9.60	16	9.61	26		36		46	
7	9.59	17	9.61	27		37		47	
8	9.59	18	9.61	28		38		48	
9	9.61	19	9.60	29		39		49	
10	9.61	20	9.60	30		40		50	
A	**86.76**	**B**	**96.04**	**C**	**15.03**	**D**	**0.00**	**E**	**0.00**

Joint		**Joint**	**Length**	**Joint**	**Length**	**Joint**	**Length**	**Joint**	**Length**
151		161		171		181		191	
152		162		172		182		192	
153		163		173		183		193	
154		164		174		184		194	
155		165		175		185		195	
156		166		176		186		196	
157		167		177		187		197	
158		168		178		188		198	
159		169		179		189		199	
160		170		180		190		200	
F	**0.00**	**G**	**0.00**	**H**	**0.00**	**I**	**0.00**	**J**	**0.00**

A	86.76									
B	96.04	182.80							**Joints**	**Length**
C	15.03	197.83					**full jts this pg**		23	197.83
D	0.00	197.83					**jts f/ pg 2**			
E	0.00	197.83					**total full jts run**		23	197.83
F	0.00	197.83					**Joints on Location**			
G	0.00	197.83			**Remarks:**					
H	0.00	197.83			Tubing Stick up = 1.3 above GL (@0.0 mRF.) GL - Rf = 1.3 m					
I	0.00				Joint #2 is PSN. Daily Report lists tubing at 197.3 mRF					
page2					Perfs @ 192 - 197 mRF					
J					Joints 22 & 23 are estimates. Total = 5.43 m					
Total	197.83				Tubiing Depth (from tally) = 197.83+1.3-1.3 = 197.8MRF					
					Tally transcribed from field notes.					

Appendix - XIV

Production Testing Calculations
June 15th - Aug 16th, 2004

Vulcan Minerals Inc.

Flat Bay #1 Well - Recovery of Frac Fluid and Production rates

Tubing Depth:	197.3	mRF	
RF - GL	1.38		
Tubing Depth:	195.92	mGL	
Annular Volume:	0.005618	m3 per m	
Tubing Volume:	0.002019	m3 per m	A bit less due to scapers
Annular Volume:	1.101	m3	6.901 bbls
Tubing Volume:	0.396	m3	2.480 bbls
Total Well Volume:	1.496	m3	9.381 bbls
Tank Guage:	0.186	m3 per inch	

							After 8 a.m. that day												
							Shipments in and out of System							System Production		In System Transfers			
							In & Out of Tank		Into Well		Net Shipment Out			Daily	Cumulative	*Ie: from tank to Well = positive*			Volume Pumped
Date	Status	8 a.m. Guage			Stock Tank Volume	Stock Tank Change	Oil Shipped	Water Drained	Deisel In	Water In	Deisel	Water	Fluid	Fluid	Fluid	Deisel	Water	Fluid	Fluid
		ft.	inches	m3	m3	m3	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*
10-Jun-04																			
11-Jun-04																			
12-Jun-04																			
13-Jun-04																			
14-Jun-04																			
15-Jun-04			8	1.488	1.488	1.488			0.160	0.600	-0.160	-0.600	-0.760	1.488	1.488				1.488
16-Jun-04			8	1.488	1.488									-0.760	0.728				
17-Jun-04			8	1.488	1.488					0.900		-0.900	-0.900		0.728				
18-Jun-04	Pump Down		8	1.488	1.488					1.500		-1.500	-1.500	-0.900	-0.172				
19-Jun-04	Pump Down		8	1.488	1.488									-1.500	-1.672				
20-Jun-04	Pump Down		16	2.976	2.976	1.488								1.488	-0.184				1.488
21-Jun-04	Pump Down		16	2.976	2.976										-0.184				
22-Jun-04			16	2.976	2.976										-0.184				
23-Jun-04	Pump Down		16	2.976	2.976										-0.184				
24-Jun-04	Pump Down		16	2.976	2.976										-0.184				
25-Jun-04	Pump Down		16	2.976	2.976										-0.184				
26-Jun-04	Pump Down		16	2.976	2.976										-0.184				
27-Jun-04	Pump Down		16	2.976	2.976										-0.184				
28-Jun-04	Pump Down		16	2.976	2.976										-0.184				
29-Jun-04	Pump Down		16	2.976	2.976										-0.184				
30-Jun-04	Pump Down		16	2.976	2.976										-0.184				
01-Jul-04	Pump Down		16	2.976	2.976										-0.184				
02-Jul-04	Pump Down		16	2.976	2.976										-0.184				
03-Jul-04	Pump Down		16	2.976	2.976										-0.184				
04-Jul-04	Pump Down		16	2.976	2.976										-0.184				
05-Jul-04	Pump Down		16	2.976	2.976										-0.184				
06-Jul-04	Pump Down		16	2.976	2.976										-0.184				
07-Jul-04	Pump Down		16	2.976	2.976										-0.184				
08-Jul-04	Pump Down		16	2.976	2.976										-0.184				
09-Jul-04	Pump Down		16	2.976	2.976										-0.184				
10-Jul-04	Pump Down		16	2.976	2.976										-0.184				
11-Jul-04	Pump Down		16	2.976	2.976										-0.184				
12-Jul-04	Pump Down		16	2.976	2.976										-0.184				
13-Jul-04	Pump Down		16	2.976	2.976										-0.184				
14-Jul-04	Pump Down		16	2.976	2.976										-0.184				
15-Jul-04	Pump Down		16	2.976	2.976										-0.184				
16-Jul-04	Pump Down		16	2.976	2.976										-0.184				
17-Jul-04	Pump Down		16	2.976	2.976										-0.184				
18-Jul-04	Pump Down		16	2.976	2.976										-0.184				
19-Jul-04	Pump Down		16	2.976	2.976										-0.184				
20-Jul-04	Pump Down		16	2.976	2.976										-0.184				
21-Jul-04	Pump Down		16	2.976	2.976										-0.184				
22-Jul-04	Pump Down		16	2.976	2.976										-0.184				
23-Jul-04	Pump Down		16	2.976	2.976										-0.184				
24-Jul-04	Pump Down		16	2.976	2.976										-0.184				
25-Jul-04	Pump Down		16	2.976	2.976										-0.184				
26-Jul-04	Pump Down		16	2.976	2.976										-0.184				
27-Jul-04	Pump Down		16	2.976	2.976										-0.184				
28-Jul-04	Pump Down		16	2.976	2.976										-0.184				
29-Jul-04	Pump Down		16	2.976	2.976										-0.184				
30-Jul-04	Pump Down		16	2.976	2.976										-0.184				

Vulcan Minerals Inc.

Flat Bay #1 Well - Recovery of Frac Fluid and Production rates

Tubing Depth:	197.3	mRF		
RF - GL	1.38			
Tubing Depth:	195.92	mGL		
Annular Volume:	0.005618	m3 per m		
Tubing Volume:	0.002019	m3 per m	A bit less due to scapers	
Annular Volume:	1.101	m3	6.901	bbls
Tubing Volume:	0.396	m3	2.480	bbls
Total Well Volume:	1.496	m3	9.381	bbls
Tank Guage:	0.186	m3 per inch		

						After 8 a.m. that day												
						Shipments in and out of System							System Production		In System Transfers			
						In & Out of Tank		Into Well		Net Shipment Out			Daily	Cumulative	*Ie: from tank to Well = positive*			Volume Pumped
Date	**Status**	**8 a.m. Guage**			**Stock Tank Volume**	**Stock Tank Change**	Oil Shipped	Water Drained	Deisel In	Water In	Deisel	Water	Fluid	Fluid	Fluid	Deisel	Water	Fluid	Fluid
		ft.	inches	m3	m3	m3	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*	*m3*
31-Jul-04	Pump Down		16	2.976	2.976										-0.184				
01-Aug-04	Pump Down		16	2.976	2.976										-0.184				
02-Aug-04			22	4.092	4.092	1.116				0.875		-0.875	-0.875	1.116	0.932				1.116
03-Aug-04			28	5.208	5.208	1.116								0.241	1.173				1.116
04-Aug-04			33	6.138	6.138	0.930				0.725		-0.725	-0.725	0.930	2.103				0.930
05-Aug-04			38	7.068	7.068	0.930				0.500		-0.500	-0.500	0.205	2.308				0.930
06-Aug-04			41	7.626	7.626	0.558								0.058	2.366				0.558
07-Aug-04			44	8.184	8.184	0.558								0.558	2.924				0.558
08-Aug-04			44	8.184	8.184										2.924				
09-Aug-04			44	8.184	8.184										2.924				
10-Aug-04			44	8.184	8.184										2.924				
11-Aug-04			44	8.184	8.184										2.924				
12-Aug-04			44	8.184	8.184										2.924				
13-Aug-04			44	8.184	8.184										2.924				
14-Aug-04			47	8.742	8.742	0.558								0.558	3.482				0.558
15-Aug-04			51	9.486	9.486	0.744								0.744	4.226				0.744
16-Aug-04			54	10.044	10.044	0.558								0.558	4.784				0.558
17-Aug-04			54	10.044	10.044														
18-Aug-04			54	10.044	10.044														
19-Aug-04			54	10.044	10.044														
						10.044			**0.160**	**5.100**	**-0.160**	**-5.100**	**-5.260**	**4.784**					**10.044**

Appendix - XV

Well Site Layout
June 15th, 2004

Flat Bay #1
Well Location

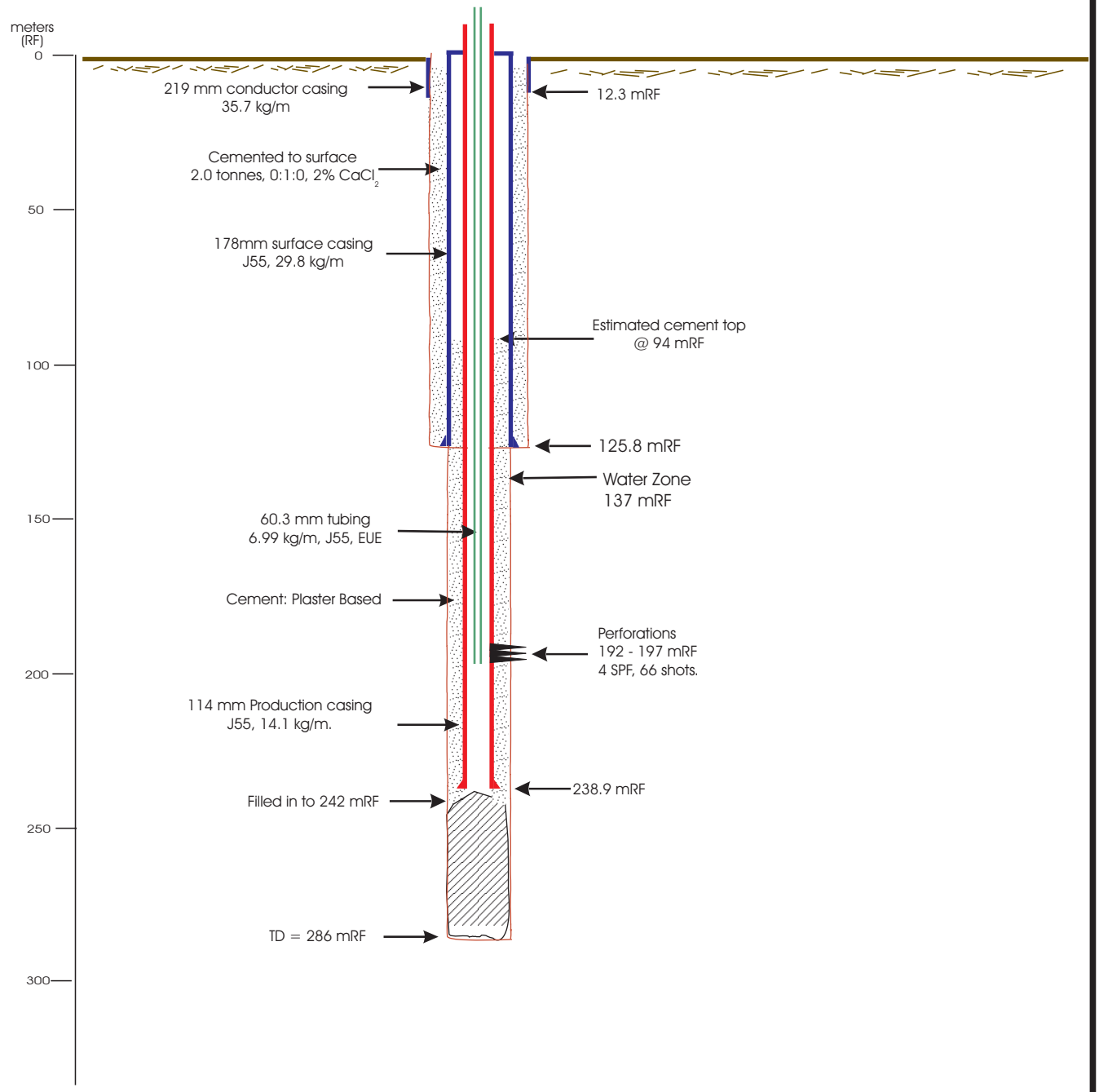
VULCAN MINERALS INC

Flat Bay #1
WELLSITE PHOTO: 2004-06-15
Looking West

Scale:	N.A.
Drawn by:	J.E.G.
Date:	2005-01-31
Drawing No:	FB 1 - Prod 1
Rev:	

Appendix - XVI

Current Well Profile
April 2nd, 2004



VULCAN minerals inc

FLAT BAY #1
WELL COMPLETION PROFILE

Scale:	NA
Drawn by:	J. Gorman
Date:	2004-12-8
Drawing No:	VUL - FB1 - C2
Rev:	0

Appendix - XVII

Well Equipment
June 15th, 2004

VULCAN minerals inc

FLAT BAY #1
WELL SITE EQUIPMENT
2004 - 06 - 15

Scale:	NA
Drawn by:	J. Gorman
Date:	2005 - 01 - 31
Drawing No:	VUL - FB1 - EQ1
Rev:	1

Appendix - XVIII

Employment Benefits Summary

Flat Bay #1
Completion Operations

Benefits Summary

	Residence		
Week #	NL	Other	Total
1	7	0	7
2	15	0	15
3	10	3	13
4	14	6	20
5	10	5	15
6	5	1	6
7	9	2	11
8	12	2	14
	82	19	
	81%	19%	

12.6 Workers on site each week on average.
10.3 Residents of the Province
2.4 Non Residents

Appendix - XIX

Day Reports - Completion
Feb 23rd - Mar 30th , 2004

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 1	DATE:	Feb. 23
DEPTH:	mKB	PROGRESS: m in	hours (last	rotating hours (la	
OPER 06:00:			FOREMAN:	MOBILE NO.:	689 0075
DAILY COST:	$33	HOLE CND.:	WEATHER: Clear	TOOLPUSH:	
CUM COST:	$33	RIG / RIG #:	TEMP.: Minus 5	T.P. MOBILE:	
FORMATION:		K.B. ELEV.:	ROADS: Good		
			AFE#	**AFE $**	

BIT PERFORMANCE

Bit No.			
Size (mm)			
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr			
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	
Make	
Model	
Liner X Stk	
SPM	
Pump Eff.	
Pump Rate	
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size
Avail WOB:	Jts DP Racks	DC Conn:
Jts DP in hole:	DP on Loc:	DP Conn:

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Move Rig	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Direct. Drill	
Coring		Cementing		Rathole	
Rm Rathole		WOC		Safety Meeting	
Cond / Circ		NU BOP's		Mix mud	
Tripping		Test BOPs			
Lubricate Rig		Drill Out Cmt			
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : #VALUE! (0000 hrs - 2400 hrs)

Contacted Harvey Gale at !0:00 AM. To clean road leading into lease. Arrived on location, backhoe and loader were in progress cleaning snow from road. Attemped to fill in ditch with backhoe ground was frozen. Sending over a 315 excavator in the morning to fill in ditch and clear snow around location Prepare site for drill and service equipment.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 2	DATE:	02/24/04
DEPTH:	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:			FOREMAN: Greg Walsh	MOBILE NO.:	689-0075
DAILY COST:	HOLE CND.:		WEATHER: Clear	TOOLPUSH:	
CUM COST:	RIG / RIG #:		TEMP.: Minus 4	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:		ROADS: Good		
			AFE#	**AFE $**	

BIT PERFORMANCE

Bit No.			
Size (mm)			
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr			
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	
Make	
Model	
Liner X Stk	
SPM	
Pump Eff.	
Pump Rate	
Pump Press.	
Drillpipe AV	
Drillcollar AV	
Nozzle Vel	

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : #VALUE! (0000 hrs - 2400 hrs)

315 Excavator and Loader arrived on location at 10:00 AM. Prepared ditch on entrance to lease. Pushed snow off lease and moved it back with excavator.Loader went back to the yard . Excavator will dig around well head in preparation for colvert. Placing shallow ditch and berm around location. Lay out of lease looks good with a gradual slope towards flare pit area. Confifrming any excess press on well prior to opening to atmosphere and recover samples from top of well.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 3	DATE:	02/25/04
DEPTH: mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:		FOREMAN:	Greg Walsh	MOBILE NO.:	689-0075
DAILY COST:	HOLE CND.:	WEATHER:	Clear	TOOLPUSH:	
CUM COST:	RIG / RIG #:	TEMP.:	-4°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	ROADS:	Good		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	311		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : #VALUE! (0000 hrs - 2400 hrs)

Summary: Cleared lease and shaped berm around parameter in preparation for drill with 315 excavator. Removed fill around well head and inspected same prior to the installation of 4' wide by 4' deep colvert.

Forecast: Expecting Petro's tanks and colvert on truck tomorrow.

Comments: Harvey Gale's equipment preformed well while preparing road and lease. Operators worked efficiently to ensure all time running equipment was productive. I would recommend these operators and equipment for future work.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1 | REPORT #: 4 | DATE: 02/26/04

DEPTH: mKB | PROGRESS: m | m | rotating hours (last 24 hrs.)

OPER 06:00: | FOREMAN: Greg Walsh | MOBILE NO.: 889-0074

DAILY COST: | HOLE CND.: | WEATHER: Wind & Snow | TOOLPUSH:

CUM COST: | RIG / RIG #: | TEMP.: -5°C | T.P. MOBILE:

FORMATION: | K.B. ELEV.: | ROADS: Poor

AFE# | AFE $

BIT PERFORMANCE

Bit No.	
Size (mm)	200
Mfg	
Type	
Serial #	
Nozzles	
From (mKB)	
To (mKB)	
Hrs on Bit	
WOB (daN)	
RPM	
Condition	
Pulled For?	
Meters	
m/hr	#DIV/0!
Cum Hrs	

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
Wt. (oz's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
PSMF	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN	DP size	114 mm 4 1/2 XH
Avail. WOB:	Jts DP Rqrd:	#VALUE!	DC Conn:	
Jts DP in hole:	DP on Loc:		DP Conn:	

VOLUMES M³

Water added	
Losses	

DRILLING OPERATIONS TIME BREAKDOWN

RU / TD		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Packer	
Coring		Cementing		Work Pipe	
Run Hydrils		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOP's		Weld on Rotel	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

SIDPP	
SITHP	
MACP(MPa)	
Calc Hole Fill	
Act Hole Fill	
Last BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Mud Daily Cost

Mud Cum Cost

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : 02/26/04 (0000 hrs - 2400 hrs)

Summary: Roads in poor condition. Petro unable to move load from SpringDale. Spoke with Derrick Pardy of Pasadena in regards to heated oil truck. He should have more information in the morning.

Forecast: Petro should be over with a load of tanks in the morning along with the culvert. May need to plow some snow off the lease. Will use 315 excavator to install culvert.

ALERT OILFIELD CONSULTING SERVICES

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 5	DATE:	02/27/04
DEPTH: mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:		FOREMAN:	Greg Walsh	MOBILE NO.:	689-0075
DAILY COST:	HOLE CND.:	WEATHER:	Clear	TOOLPUSH:	
CUM COST:	RIG / RIG #:	TEMP.:	-3°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	ROADS:	Good		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load: daN	DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : 02/27/04 (0000 hrs - 2400 hrs)

Summary: Cleared snow off road and lease. Off loaded Petro truck 4ea.cylindrical vertical open top tanks 6m3 capacity. 1ea. Cylindrical horizontal tank 18m3 capacity. 1ea 48" colvert . Installed same and back filled around well head.

Forecast: Petro will be loading truck in SpingDale with Drill and timbers with intention of sending over to lease .

Comments: Pardy's waste management will be ok to heat diesel providing chemicals to be circulated back to the truck comply with the composition of the tank.
Awaiting reply from Kevin Law on report. Barry Mathews is checking on a suitable clean out assembly for displacement of well during clean out run.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 6	DATE:	02/28/04
DEPTH: mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:		FOREMAN:	Greg Walsh	MOBILE NO.:	689-0075
DAILY COST:	HOLE CND.:	WEATHER:	60k winds	TOOLPUSH:	
CUM COST:	RIG / RIG #:	TEMP.:	-6°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	ROADS:	Good		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : 02/28/04 (0000 hrs - 2400 hrs)

Summary: No trucks from petro to location. Recorded measurements of lease.

Forecast: Petro encountered problems with brakes on Truck. Will not get load out until Monday. Crew expected to arrive on location on Monday with equipment. Petro is working in thier yard over the weekend preparing eqiupment pipe and installing new fittings on back flow flare lines in preparation for Press Testing same.

Comments: Petro is trying to source 50 sacks of salt and they will also send over 20 sacks of barite which is already in the yard for well control measures. Petro will need to rent a 2" submursable pump for transfer of fluid around location. It is looking like the rig up will run into Tuesday before we are ready for a rig inspection. Clean out trip will be with a 6" bit crossed over to 3 1/2" drill rods with returns going to a rig tank 20meters from well center.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 7	DATE:	02/29/04
DEPTH: mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:		FOREMAN:	Greg Walsh	MOBILE NO.:	758-0075
DAILY COST:	HOLE CND.:	WEATHER:	Good	TOOLPUSH:	
CUM COST:	RIG / RIG #:	TEMP.:	-2°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	ROADS:	Good		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : 02/29/04 (0000 hrs - 2400 hrs)

Summary; No loads to location from Petro. Contacted Petro for update.

Forecast: Will be moving over wellheads and pipe from Harvey Gale's yard to the lease. Load should be over in the morning from Petro . Start to spot drill in position and block up.

Comments; Going to contact Kevin Law with schlumberger to confirm detals on cement job and frac.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 8	DATE:	March 01/04
DEPTH: mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:		FOREMAN:	Greg Walsh	MOBILE NO.:	689-0075
DAILY COST:	HOLE CND.:	WEATHER:	Clear	TOOLPUSH:	
CUM COST:	RIG / RIG #:	TEMP.:	-3°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	ROADS:	Good		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : March 1, 2004 (0000 hrs - 2400 hrs)

Summary: Inspected Well head inventory. Offloaded Petro's equipment Drill , clean out tubulars,pumps and diverter system. Confirmed pressure at wellhead and obtained samples from top of well. Prepared tubulars to move over from Harvey Gales yard.

Forecast: Offload 4 1/2" casing and 2 3/8" tubing.Pump out excess fluid on top of well. Rig up drill over well head. Nipple up diverter. lay out flare lines and lines to the mud tanks.

Comments: Schlumberger indicated there would be no concern with processing chemicals through the aluminum tank during the Fac. Harvey Gale will supply a welder for the bell nipple.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 10	DATE:	March 03/04
DEPTH: mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00: Rig Released		FOREMAN:	Greg Walsh	MOBILE NO.:	689-0074
DAILY COST:	HOLE CND.:	WEATHER:	snow/rain	TOOLPUSH:	
CUM COST:	RIG / RIG #:	TEMP.:	-2°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	ROADS:	slippery		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : March 03/04 (0000 hrs - 2400 hrs)

Summary: Completed positioning Drill 5' above ground level over wellhead.Rigged up and raised mast. Installed 4 guide wires. Fabricated stairs to rig floor and installed prefab wells on rig floor. Offloaded Petro equipment and placed on location. Prepared casing flange onto well head for diverter installation. Positioned water tanks and pump for diplacement during cleanout trip.

Forecast; Install divrter. Weld extention and side outlet on bell nipple for returns during cleanout run. Hook up flare lines and return lines. Run water lines to rig floor. Organize excess loads around location. Prepare cleanout string to be picked up. Carry out rig inspection.

Comments: Monitoring well during rig up minimal backflow less than 1 liter per hour. Will need salt on location prior to running cleanout trip.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 11	DATE:	March 14/04
DEPTH: mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:		FOREMAN:	Greg Walsh	MOBILE NO.:	489-0075
DAILY COST:	HOLE CND.:	WEATHER:	clear	TOOLPUSH:	
CUM COST:	RIG / RIG #:	TEMP.:	-6°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	ROADS:	Good		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN	DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:		4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:		

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : March 04/04 (0000 hrs - 2400 hrs)

Summary: Completed rig up on Drill Floor and hand rails. Installed fittings on flair lines. Installed well head and diverter. Fabricated bell nipple for returns to mud tanks and cross over for running 4 1/2" casing..Installed flare lines and water lines. Offloaded salt and extra drill rods. Inspected Drill rods for condition & extra tanks on location confirming no missing plugs. Fuctioned accumulator and inspected diverter. Installed swedge and secured well.

Forecast: Finish rig up of return line to mud tanks. Install plywood around inside of sub base to block prevaling winds.
Carry out rig inspection. Make up 5 3/4" bit and pick up 3 1/2" drill rods running in hole & confirming condition. Circ bottoms up & pooh laying down three pipe at a time.

Comments: 2" side outlet leading to flare line below diverter was freezing over while rigging up diverter and flaire lines over a 4 hour period sheeting in sub base with plywood and tarps. I will enquire about a sourse of heat to ensure well control system does not

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 12	DATE:	March 05/04
DEPTH: mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:		FOREMAN:	Greg Walsh	MOBILE NO.:	689-0075
DAILY COST:	HOLE CND.:	WEATHER:	clear	TOOLPUSH:	
CUM COST:	RIG / RIG #:	TEMP.:	-6°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	ROADS:	Good		
		AFE#		**AFE $**	

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : March 05/04 (0000 hrs - 2400 hrs)

Summary: Continue to install plywood around sub base and tarps around drill floor. Installed hot air furnace and ducting for heat supply around diverter system.Hooked up generator power supply to crew's lunch trailer. Place safety equipment around location and carry out Drilling Rig Inspection Checklist. Prepare to pick up clean out assembly.

Forecast: Hook up diverter and bell nipple. Tie in return line to mud pits. Make up 5 1/2" bit to 3 1/2" drill rods RIH to shoe & circ. Continue in hole to 250m as hole dictates. Circulate bottoms up and POOH 3 joints at a time.

Comments: Confirmed details with Pardy's Waste regarding hot diesel for frac. Discussed cement job and details .with schlumberger . Lavern Pynne with Petro is confident water can be heated on location providing we start 12 hours prior to cement job.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 13	DATE:	March 06/04
DEPTH: mKB	PROGRESS: #REF! m	in	rotating hours (last 24 hrs.)		
OPER 06:00:			FOREMAN: Greg Walsh	MOBILE NO.:	754-0074
DAILY COST:	HOLE CND.:		WEATHER: Blowing Snow	TOOLPUSH:	
CUM COST:	RIG / RIG #:		TEMP.: -6°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:		ROADS: Slippery		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	#REF!
Mud Up @	#REF!

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length: #REF!	Hook Load:	daN	DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:		4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:		

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh	#REF!	
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : March 06 /04 (0000 hrs - 2400 hrs)

Summary:Rig up Bell Nipple and flare line to well head. Run flow line to mud tanks. Place catch tank on end of flare line. Function Diverter confirm closing time of 35 seconds with 1000 psi on regulator. Review posted shut in procedures with crew.Install plywood and tarps around substructure . Prepare to pick up clean out assembly.
!2:00 - 21:00 Hrs Hold tool box talk with crew. Review well control procedures and equipment for monitoring flow returns while running in hole and circulating bottoms up. Make up bit and x/o to 3 1/2 rods . RIH to shoe establish circ while monitoring returns with gas detector at flow line and recovering samples. Continue to RIH to 235m string showing resistance. RIH to 242m string hanging up pulled back to 235m circulate and confirm well static. Attempted to RIH string hanging up at 242m. Pullback above shoe laying down three joints at a time. Flow checked well static , installed safety valve and secured well.

Forecast: POOH laying down 3 1/2" drill rods. Rig up and run 114mm casing as per program. Fill cement water tanks with water supply from town water supply and rig up heater to prewarm water to 10 degrees. Prepare for cementing on Monday.

Comments: Petro Drilling completed mobilization @ 12:00 Hrs and worked until 21:00 hrs to ensure well was in no danger of hole unstability or well control issues. Contacted schlumberger to arrive on location for cementing 114mm casing on Monday morning. Harvey Gale will be transporting water to lacation on Sunday and assiting with moving casing. Bit on clean out trip was 146mm and collars on casing are 127mm.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 14	DATE:	march 07/04
DEPTH: mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:		FOREMAN:	Ed. Weiterman	MOBILE NO.:	689-0075
DAILY COST:	HOLE CND.:	WEATHER:	snow	TOOLPUSH:	
CUM COST:	RIG / RIG #:	TEMP.:	-3°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	ROADS:	fair		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : #VALUE! (0000 hrs - 2400 hrs)

Sumary :Hold T.B.T &review work assignments. P.O.O.H. , laying down 3.5 drill rod.Rig up to run 4.5 (114mm-J-55 csg.).
Land csg. @ 237.91. Stopped @ 242mtrs. Top of float collar at 230.57 mtrs.total joints run 35 jts.plus a space out pup of 1.11 mtrs to lay csg. collars at 191mtrs. to 198 mtrs for perforation as per program. Brought on two loads of fresh water and rigged up to heat same. (4.5 m3 per load/total of 9m3).Lined up night watch to keep the water tanks heating.
Schlm. cmt. unit not available till 1500 hrs. +/- due to boat connections.

Forecast:

Top up fresh water to 13.5 m3 and heat same. Prepare for cmt. job.
Also make preparations for rig up after cmt. job to go into perforating as per program.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 15	DATE:	March 8, 2004
DEPTH: mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:			FOREMAN: Ed. Weiterman	MOBILE NO.:	
DAILY COST:	HOLE CND.:		WEATHER: clear	TOOLPUSH:	
CUM COST:	RIG / RIG #:		TEMP.: -3°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:		ROADS: goodSS		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	min
Bottoms Up	min
Tanks	m3
Hole Volume	m3
System Vol.	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : March 08/04 (0000 hrs - 2400 hrs)

Summary

On lease @ 0900 hrs.
Crew fuel up and purchase fuel with truck and driver. Circulate and heat water. Unload 4.5 m3 water for total of 13.5 m3
Keep heat and circulation going for he cmt. Job schedualed for early morning. Pending rig up and arrival of Dowell/Schlm.
Approx. 0600hrs. in conference with Keven.
Also have escavator clear road after unloading fresh water in tank. Moved tbg. and remaining csg.(1000 hrs. to 1500 hrs.)
Crew work on set of stairs,preliminary lease preparation for cmt. job.Check Huber chokes,Strap tbg.and position for running same. with elvators and space out in drrk. Crew finished @ 1700hrs.

Forecast

On lease for rig up @ 0530 hrs. for cmt. job @ per program

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 16	DATE:	09/mar./04
DEPTH: 2030 mKB	PROGRESS:	m in	rotating hours (last 24 hrs.)		
OPER 06:00:			FOREMAN: Ed. Weiterman	MOBILE NO.:	
DAILY COST:	HOLE CND.:		WEATHER: sunny	TOOLPUSH:	
CUM COST:	RIG / RIG #:		TEMP.:	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:		ROADS: good		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2	
Make	GD	
Model	PZ7	
Liner X Stk	229 X152	
SPM	95	
Pump Eff.	90%	
Pump Rate	0.92	
Pump Press.		kPa
Drillpipe AV		m/min
Drillcollar AV		m/min
Nozzle Vel		m/sec

MUD & CHEMICALS

Mud Cycle	69	min
Bottoms Up	69	min
Tanks		m3
Hole Volume	64	m3
System Vol.	64	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : 09/mar./04 (0000 hrs - 2400 hrs)

Summary:

On lease a 0600 hrs.
Discuss site lay out with Dow./Schlm. To set up trucks for cmt. Job.
Set up for cmt job, review cmt. Program, and go over calculations and time factors for thickening process for cmt.
Review water temps. With cmt. foreman he wanted the water temp for optimum cmt. job at 10 c. (thats what he got).
Held T.B.T. reveiwed job plan , and started mixing and pumping cmt. at 1215 hrs.
At 1232 hrs. open valve flush cmt line with fresh water and release cmt. plug.
Start displacement of cmt. at 1235 cmt plug released,at 1236 displacing cmt .
At 1242 hrs 1 m3 pumped, Problems with cmt. pump not pumping. No returns.
Tried various methods to get pumps to put out, (estimate +/- .2 m3, at 1245 hrs.)
Rig up rig pump at 1300 hrs. Blew pop-valve and washed out same. at 1300 p.s.i.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 17	DATE:	10/mar./04
DEPTH: 2030 mKB	PROGRESS:	m in	rotating hours (last 24 hrs.)		
OPER 08:00:			FOREMAN: Ed. Weiterman	MOBILE NO.:	
DAILY COST:	HOLE CND.:		WEATHER: sunny	TOOLPUSH:	
CUM COST:	RIG / RIG #:		TEMP.:	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:		ROADS:		
			AFE#	AFE $	

BIT PERFORMANCE

Bit No.	
Size (mm)	200
Mfg.	
Type	
Serial #	
Nozzles	
From (mKB)	
To (mKB)	
Hrs on Bit	
WOB (daN)	
RPM	
Condition	
Pulled For?	
Meters	
m/hr	#DIV/0!
Cum Hrs	

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2	
Make	GD	
Model	PZ7	
Liner X Stk	229 X152	
SPM	95	
Pump Eff.	90%	
Pump Rate	0.92	
Pump Press.		kPa
Drillpipe AV		m/min
Drillcollar AV		m/min
Nozzle Vel		m/sec

MUD & CHEMICALS

Mud Cycle	69	min
Bottoms Up	69	min
Tanks		m3
Hole Volume	64	m3
System Vol.	64	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail. WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TD		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : 10/mar.04 (0000 hrs - 2400 hrs)

Summary:

On lease @ 0700 hrs.—Fired up equipment, and lifted annular, and removed 114 mm pup jt. Nipple up same. Rig up and run Bit, core bbl.and drill string to tag top of cement @108.3 mtrs. Leaves 121.7 mtrs to core(ordered boxes on lease for core). Calculated cement top in annulus as 114mtrs. with 2.7m3 slurry mixed and pumped.Old 7in. Shoe at 125.9mtrs=12 mtrs w/ cmt. Set drill string on wiper plug and rig down flow nipple and install swedge to close annular on collar and swedge to press test. Pressure test at three intervals for 30mins.ea. interval @500p.s.i/ 600p.s.i./ 700 p.s.i. Held o.k. and took pictures of pressure on gauge with digital. Rig out press test equipt.install flow nipple. Winterize rig for morning tour to cut core.
Left lease at 1900hrs.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 18	DATE:	11/mmar./04
DEPTH: 2030 mKB	PROGRESS:	m in	rotating hours (last 24 hrs.)		
OPER 06:00:			FOREMAN: Ed. Weiterma	MOBILE NO.:	
DAILY COST:	HOLE CND.:		WEATHER: sunny	TOOLPUSH:	
CUM COST:	RIG / RIG #:		TEMP.:	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:		ROADS:		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	69	min
Bottoms Up	69	min
Tanks		m3
Hole Volume	64	m3
System Vol.	64	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : 11/mar./04 (0000 hrs - 2400 hrs)

Summary:

On location @ 0700 hrs.---Fired up equipment, and, got water to drill floor, and cut core 0830 hrs.to 1030 hrs. to cut first two mtrs. of core @ 108 mtrs. to 110 mtrs. and wiper plug.

Cut core at 1030 hrs. to 1930 hrs. from 110mtrs to 143 mtrs. Average +/- 3 mtrs. Per hour retreiving full coverage of rock hard cement. Winterised rig for morning tour to cut core . Proposed depth of coring is 230 mtrs.

Environment of Nfld. onsite commented that operation was fit for purpose.

Discovered that a crane is required to suspend Perf. lubricator 45 ft. required. Rig Drrk. handles 35 ft.

Forecast:

Cut core and rig up what we can get at, when coring to perforate, and frac. with Dow./Schlm.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 19	DATE:	12/mar.04
DEPTH: 2030 mKB	PROGRESS:	m in	rotating hours (last 24 hrs.)		
OPER 06:00:			FOREMAN: Ed. Weiterman	MOBILE NO.:	
DAILY COST:	HOLE CND.:		WEATHER: wind/rain/snow	TOOLPUSH:	
CUM COST:	RIG / RIG #:		TEMP.:	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:		ROADS: poor		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2	
Make	GD	
Model	PZ7	
Liner X Stk	229 X152	
SPM	95	
Pump Eff.	90%	
Pump Rate	0.92	
Pump Press.		kPa
Drillpipe AV		m/min
Drillcollar AV		m/min
Nozzle Vel		m/sec

MUD & CHEMICALS

Mud Cycle	69	min
Bottoms Up	69	min
Tanks		m3
Hole Volume	64	m3
System Vol.	64	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : March 12, 2004 (0000 hrs - 2400 hrs)

Summary:

On location @ 0700 hrs.---Fire up equipment, and got water to drill floor,and cut core : 0830 hrs. @143 mtrs. - 1730 hrs: cmt.
Is getting softer. @185 mtrs.:---@1900hrs.@194mtrs. Stake down heat hoses, install v-door prefabs for hi winds.
Locate tanks for completion program, open road, with escavator operator.(1000hrs-1430hrs.)
Off location @ 1930hrs.

Forecast:

Core cmt to 230 mtrs. Lay down drill string, rigging up for completion work.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 20	DATE:	March 13, 2004
DEPTH: 2030 mKB	PROGRESS:	m in	rotating hours (last 24 hrs.)		
OPER 06:00:			FOREMAN: Ed. Weiterman	MOBILE NO.:	
DAILY COST:	HOLE CND.:		WEATHER: Wind/Snow	TOOLPUSH:	
CUM COST:	RIG / RIG #:		TEMP.:	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:		ROADS: Medium		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2	
Make	GD	
Model	PZ7	
Liner X Stk	229 X152	
SPM	95	
Pump Eff.	90%	
Pump Rate	0.92	
Pump Press.		kPa
Drillpipe AV		m/min
Drillcollar AV		m/min
Nozzle Vel		m/sec

MUD & CHEMICALS

Mud Cycle	69	min
Bottoms Up	69	min
Tanks		m3
Hole Volume	64	m3
System Vol.	64	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:	daN DP size	114 mm
Avail WOB:	Jts DP Racks #VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:	DP Conn:	

VOLUMES M^3

Water added	
Losses	

Mud Daily Cost

Mud Cum Cost

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : 13/mar./04 (0000 hrs - 2400 hrs)

Summary:

Fired up equipment, and got water to drill floor to cut core from 194 mtrs. To 230 mtrs.(0830 hrs.-1630 hrs.)
Soft cmt. From 196mtr. To 206 mtrs. Coring 9 mtrs. Per hour. Firmed up to hard the last 15 mtrs.
P.O.H. laying down drill rods. 1630 hrs. to 1830 hrs. / Winterise rig for morning tour,Leave location @ 1930 hrs.
(cored cmt. 108 mtrs-230 mtrs, with annular closed to keep cuttings from filling annulus on returns to surface.)
Contact personel for Perf. job, and Frac. job mon. & tues. !!!

Forecast

Remove anular and rig up X-mas tree for .
Phase 3 of the completion and stimulation program.
Prepare for perfotation,and Frac. job as per program.

Vulcan Minerals

DAILY DRILLING REPORT

Flat Bay # 1			REPORT #: 21	DATE:	14/mar./15
DEPTH: 2030 mKB	PROGRESS: m in		rotating hours (last 24 hrs.)		
OPER 06:00:			FOREMAN: Ed. Weiterma	MOBILE NO.:	
DAILY COST:	HOLE CND.:		WEATHER: sunny/cool	TOOLPUSH:	
CUM COST:	RIG / RIG #:		TEMP.:	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:		ROADS: good		

AFE# **AFE $**

BIT PERFORMANCE

Bit No.			
Size (mm)	200		
Mfg.			
Type			
Serial #			
Nozzles			
From (mKB)			
To (mKB)			
Hrs on Bit			
WOB (daN)			
RPM			
Condition			
Pulled For?			
Meters			
m/hr	#DIV/0!		
Cum Hrs			

SURVEYS

DRILLING FLUID

Time	
Depth(m)	
Density	
Mud Grad	
Vis	
PV	
YP	
Gels	
pH	
WL (cc's)	
Filter Cake	
Sand (%)	
Solids (%)	
Oil (%)	
Pf/Mf	
MBT	
Cl (ppm)	
Ca (ppm)	
Mud Co.	Newpark
Mud Man	
Mud Up @	1700

PUMPS

Pump No.	#2
Make	GD
Model	PZ7
Liner X Stk	229 X152
SPM	95
Pump Eff.	90%
Pump Rate	0.92
Pump Press.	kPa
Drillpipe AV	m/min
Drillcollar AV	m/min
Nozzle Vel	m/sec

MUD & CHEMICALS

Mud Cycle	69	min
Bottoms Up	69	min
Tanks		m3
Hole Volume	64	m3
System Vol.	64	m3

Mud & Chemicals Added:

BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)

BHA Length:	Hook Load:		daN DP size	**114 mm**
Avail WOB:	Jts DP Racks	#VALUE!	DC Conn:	4 1/2 XH
Jts DP in hole:	DP on Loc:		DP Conn:	

VOLUMES M^3

Water added	
Losses	

DRILLING OPERATIONS TIME BREAKDOWN

RU / TO		Survey		Plug Back	
Drill Actual		Logging		Fishing	
Reaming		Run Casing		Work w/Pason	
Coring		Cementing		Work Pipe	
Rm Rathole		WOC		Mix LCM	
Cond / Circ		NU BOP's		Safety meet	
Tripping		Test BOPs		Weld on Bowl	
Lubricate Rig		Drill Out Cmt		BOP Drill	
Repair Rig		DST			
Slip/Cut Line		Hndle Tools		Total Hrs	

WELL CONTROL

RSPP	
ST/Min	
MACP(kPa)	
Calc Hole Fill	
Act Hole Fill	
Lst BOP Drill:	
Calc Hole Fill	
Act Hole Fill	

Mud Daily Cost

Mud Cum Cost

SOLIDS CONTROL

Shaker Make	Derrick	
Shaker Mesh		
	Desilter	Centrifuge
Vol UF (l/min)		
U.F. (kg/m3)		
O.F. (kg/m3)		
Hours/Days		

Boiler Hrs: (to 24:00)

24 HOUR SUMMARY FOR THE DATE : #VALUE! (0000 hrs - 2400 hrs)

Summary:

On location @ 0700 hrs.,Fired up equipment & nipple down annular.Set slips on 114 mm csg.and install 60.3 mm tbg. Bowl.
Run 19 jts 60.3 mm tbg. Installed seating nipple after 1st. Jt. Of tbg.Torqued to 1300 ft. lbs. As per optimum torque on spec. sheet.
Land out tbg. hanger into bowl and hammer up lock nut (hammer union). Instal 2 3/8 eue crown valve with 2 1/16 i.d.
@ 2000 p.s.i W.P. Rig up 2 in. side outlet valves and Test pump. Test Tubing, casing, and valves to 2000 p.s.i. for 30 mins.
Held o.k. 60 p.s.i.drop Bleed off trapped air. no surface leaks.
Used escavator for two hrs. sweeping road and moving equipment, to prepare for Perfs. and frac. job.

Forecast

Rig up and pref. with Dow/ Schlm. tomarrow (mon.)
Frac. job on Tues.

DAILY WORKOVER REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *14-Mar-04*	**SUPERVISOR:** *Mark Stocking*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:** *Petro Drilling Company Ltd.*	**REPORT No.:** *22*

WELL INFORMATION:		**SIZE**	**DEPTH**
SITP:		**CASING:** *114mm*	*238.5 mKB (782 ft KB)*
SICP:		**TUBING:** *60.3 EUE*	*182.8 mKB (600 ft KB)*
KB TO GL:		**BH TOOLS:**	
TD:		**PSN:**	
PBTD:	*230.0 mKB* (755 ft KB)	**RODS:**	
OPEN HOLE	*Plugged-Back*		
OTHER:			

SUMMARY OF OPERATIONS: *Run temperature/pressure survey and correlation log, perforate 114mm casing*

CURRENT STATUS & PLANS: *Perforating completed, prepare for stimulation job.*

DETAILS OF OPERATIONS:

TIME	**REMARKS**
07:00	*Arrive on lease, meet with Schlumberger crews, and go over the perforating and stimulation programs, discuss areas of concern. Had rig crew disassemble roof and wall panels on rig shanty for logging. Rig-in loggers and crane, set up to log. Run temperature survey, pressure survey, and correlation strip, POOH and install swab, pull swab from 70m until dry.*
12:30	*Conduct prejob safety for critical operation, RIH with tubing gun (perf. strip) and adjust collars for correlation, run verification pass, give OK to shoot. Gun did not fire, and upon pulling up into tubing the tools stuck. After several attempts to free tools,*
15:30	*they came free and we were able to POOH. Lay down tube, disassemble perf. strip, and run test fire sequence, change out shooting sub and retest. Install lubricator tube on tubing, RIH and readjust collars, run verification pass, give OK to shoot. Fire shots and run strip to confirm. (Perforated interval - from 192m to 197m, 13 shots per metre). POOH and lay down tube with crane, release crane at 18:30, pack up loggers, secure well, and release rig crew at 19:00 hrs.*
20:00	*Rig out loggers and leave lease.*
	Frac sand was delivered to lease (H. Gale), arranged to have fuel heated, delivered and also vac unit reserved (D. Pardy) for stimulation job tomorrow, fire fighting standby was arranged by P. Laracy.

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY WORKOVER REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *16-Mar-04*	**SUPERVISOR:** *Mark Stocking*	**LOCATION:** ***Flat Bay #1***
AFE#:	**RIG No.:** *Petro Drilling Company Ltd.*	**REPORT No.:** *23*

WELL INFORMATION:		**SIZE**	**DEPTH**
SITP:	**CASING:**	*114mm*	*238.5 mKB (782 ft KB)*
SICP:	**TUBING:**	*60.3 EUE*	*182.8 mKB (600 ft KB)*
KB TO GL:	**BH TOOLS:**		
TD:	**PSN:**		
PBTD: *230.0 mKB* (755 ft KB)	**RODS:**		
OPEN HOLE *Plugged-Back*			
OTHER:			

SUMMARY OF OPERATIONS:	*Have stimulation fluid delivered, and assemble equipment for job, fill hole and perform acid squeeze. Stimulation of well was suspended due to a problem with the gel breaking out prematurely.*
CURRENT STATUS & PLANS:	*Secure wellsite until more materials can be delivered to accomplish stimulation objectives.*

DETAILS OF OPERATIONS:

TIME	**REMARKS**
07:00	*Arrive on lease, loader operator and stimulation crew were on site, meet with Schlumberger rep. (Lowe), and discuss daily operation objectives, crews took on acid, laid out iron an made connections from pumper to tubing, and flow lines to annulus.*
10:00	*All units had arrived (vacuum truck, fuel tanker, and firefighters), spot all units, conduct prejob safety with all personnel on site*
12:30	*displace fresh water in well with fuel oil, spot 500 litres of 10% HCL acid and allow to pickle for 5 minutes, squeeze acid, press rose to 10,000 kPa and dropped to 7,200 kPa with an established feed rate of 0.9m^3, stop pumping after squeezing 0.4m^3, and over flush with additional 1m3 of fuel oil. Mix gel with pumper and fuel tanker.*
14:00	*Blend gelled fuel with sand in pumper batch tanks. The breaker was introduced in one of the batch tanks, and the result was the gel broke down prematurely causing the sand to fall out of the gelled fuel. Some efforts were made to resurrect the gel, but it was soon apparent that we could not complete the job with out having more sand and chemicals delivered to the well site.*
16:00	*One of the batch tanks had to be vacuumed out, and upon doing this they attempted to circulate the lines out to the vac truck. At this point one of the lines burst on the pump truck causing a 50 -100 litre fuel spill, this was vacuumed up immediately and as much of the contaminated snow as would vacuum up. The line on the pumper was repaired*
	Fuel and water returns were loaded from the rig tank, and remainder of gelled fuel was transferred to the pumper (6m^3).
19:15	*The well was shut in and secured, and night watchman was on site prior to my departure.*
	Total fuel oil, water and sand taken off site for disposal by Pardy vac truck is 7.8m^3.

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY WORKOVER REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *17-Mar-04*	**SUPERVISOR:** *Mark Stocking*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:** *Petro Drilling Company Ltd.*	**REPORT No.:** *24*

WELL INFORMATION:		**SIZE**	**DEPTH**
SITP:	**CASING:**	*114mm*	*238.5 mKB (782 ft KB)*
SICP:	**TUBING:**	*60.3 EUE*	*182.8 mKB (600 ft KB)*
KB TO GL:	**BH TOOLS:**		
TD:	**PSN:**		
PBTD: *230.0 mKB* (755 ft KB)	**RODS:**		
OPEN HOLE *Plugged-Back*			
OTHER:			

SUMMARY OF OPERATIONS:	*Secure wellsite and return rental items, meet with Dowel/Schlumberger crew and arrange to have the gelled fuel vacuumed out of their pumper and transferred to disposal facility.*
CURRENT STATUS & PLANS:	*Standby (rig only) until material and equipment can be delivered to resume stimulation job.*

DETAILS OF OPERATIONS:

TIME	**REMARKS**
07:00	*Arrive on lease, have loader on site to load up generator and pump, also used to scrap up contaminated snow were fuel was spilled and dumped into open top tank, meet with stimulation crew and arranged to have Pardy vac truck come out to site and vacuum gelled fuel off of D/S pumper. Instructed crew to add sufficient breaker to gelled fuel once it was loaded to return fuel to its original viscosity. Met with H. Legg and arranged to have swab and pack off picked up at Eddy's Services in Stephenville.*
12:30	*Leave lease for flight home*
	Total fuel oil, and sand taken off site for disposal by Pardy vac truck is 6.0m³.

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY WORKOVER REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *26-Mar-04*	**SUPERVISOR:** *Mark Stocking*	**LOCATION:** ***Flat Bay #1***
AFE#:	**RIG No.:** *Petro Drilling Company Ltd.*	**REPORT No.:** *25*

WELL INFORMATION:		**SIZE**	**DEPTH**
SITP:		**CASING:** *114mm*	*238.5 mKB (782 ft KB)*
SICP:		**TUBING:** *60.3 EUE*	*182.8 mKB (600 ft KB)*
KB TO GL:		**BH TOOLS:**	
TD:		**PSN:**	
PBTD:	*230.0 mKB* (755 ft KB)	**RODS:**	
OPEN HOLE	*Plugged-Back*		
OTHER:			

SUMMARY OF OPERATIONS: *Check pressures, set up to resume frac program, fracture well, standby prior to flow back.*

CURRENT STATUS & PLANS: *Standby for gelled fuel to break, flow back well tomorrow if and when viscosity is suitable.*

DETAILS OF OPERATIONS:

TIME	**REMARKS**
07:00	*Arrive on lease, Schlumberger crew arrived on site at 08:30, Petro Drilling crew arrived at 09:00 along with H. Gale truck which was delivering frac equipment/materials, Gale loader arrived approximately a half hour latter and unloaded the trailer, rig crew checked SICP and SITP (there was a small amount of pressure on both sides, but it was TSTM).*
11:15	*Vac truck and fuel tanker arrived on site, and both loads were put in place for the frac job.*
12:40	*Fire apparatus arrived on scene, and was located to provide protection to frac crew, and equipment, frac crew started blending gel and fuel and a test slurry was blended with accelerator and sand introduced, test was successful, and later the breaker was added to sample slurry, and sample was taken to heated area to simulate existing downhole temperatures.*
13:15	*Prejob safety conducted by K. Law with all personnel on scene attending.*
13:30	*Continue gelling fuel and blend sand for batch slurries of proppant.*
15:30	*Ready to proceed with frac, re establish injection rate with 0.3m^3 of gelled fuel, pump 7.0m^3 pad, followed by 2.8m^3 stage 1, and 2.8m^3 stage 2 proppant, flush lines and tubing with 0.4m^3 clean fuel oil.*
16:00	*Monitor pressures for 15 minutes, and shut-in well, release fire apparatus, break lines, and vac residuals from lines and tanks*
17:00	*Release fuel tanker, release vac unit with 1500 litres residuals for disposal, H. Gale loader loaded up injection pump and unused chemicals/materials.*
18:00	*Schlumberger crew and Petro crew left site, transfer pump was delivered, and I left the site at 18:15.*

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY WORKOVER REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *27-Mar-04*	**SUPERVISOR:** *Mark Stocking*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:** *Petro Drilling Company Ltd.*	**REPORT No.:** *26*

WELL INFORMATION:			**SIZE**	**DEPTH**
SITP:	2895 kPa	(420 psi)	**CASING:** *114mm*	*238.5 mKB (782 ft KB)*
SICP:	2895 kPa	(420 psi)	**TUBING:** *60.3 EUE*	*182.8 mKB (600 ft KB)*
KB TO GL:			**BH TOOLS:**	
TD:			**PSN:**	
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**	
OPEN HOLE	*Plugged-Back*			
OTHER:				

SUMMARY OF OPERATIONS: *Check pressures, set up tanks and flow line, flow well, monitor pressure.*

CURRENT STATUS & PLANS: *Standby to allow gel to break to a lower viscosity, continue flow back of well tomorrow.*

DETAILS OF OPERATIONS:

TIME	**REMARKS**
07:00	*Arrive on lease, R & R pressures (SITP=420psig, SICP=420psig)*
	Move tanks into position, plumb well for flow back and swabbing.
10:00	*Flow well, tank gain=0.7m ^{3}, returns were fairly light at start, but became more gelled, and some sand was evident in sample.*
	Shut in well, and contact operator, decision was made to let gel break for another day, and pressures were monitored for
	several hours, with another sample of fluid from well being taken at 13:00 hrs. to be evaluated in the morning.
14:00	*Shut down for day (SITP was 350 psig, SICP was 420 psig)*
	Had H. Gale excavator/operator on scene from 08:00 to 11:00 hrs. to assist in tank placement, and to redirect water draining
	across the lease, and potentially undermining rig substructure.

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY WORKOVER REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *28-Mar-04*	**SUPERVISOR:** *Mark Stocking*	**LOCATION:** ***Flat Bay #1***
AFE#:	**RIG No.:** *Petro Drilling Company Ltd.*	**REPORT No.:** *27*

WELL INFORMATION:			**SIZE**	**DEPTH**
SITP:	2585 kPa	(375 psi)	**CASING:** *114mm*	*238.5 mKB (782 ft KB)*
SICP:	2895 kPa	(420 psi)	**TUBING:** *60.3 EUE*	*182.8 mKB (600 ft KB)*
KB TO GL:			**BH TOOLS:**	
TD:			**PSN:**	
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**	
OPEN HOLE	*Plugged-Back*			
OTHER:				

SUMMARY OF OPERATIONS: *Check pressures, flow well, swab fluid from tubing.*

CURRENT STATUS & PLANS: *Swabbing back stimulation fluid.*

DETAILS OF OPERATIONS:

TIME	**REMARKS**
07:00	*Arrive on lease, R & R pressures (SITP=375psig, SICP=420psig)*
	Flow well, until the rate became poor.
09:30	*Shut in well and set up swab tube, and pack off. (tank gain=2.2m ^{3} ,and annular pressure rose from 0 to 170psi while shut in)*
11:15	*Flag line and RIH with swab, swab became stuck in tubing, take on 1m ^{3} of fluid in rig tank, and reverse circulate tubing, until*
	swab became free. POOH with swab, and continue to circulate until rig tank was empty. Install new swab cups, and clean sand
	from swab mandrel. Resume swabbing tubing from PSN until tank returns were <30 litres per trip.
15:00	*Continue to swab tubing until dry, allowing 30 minutes for fluid to move into well bore, swabbing dry, and repeating this routine*
	until 18:45. Shut-in well for night
19:00	*Shut down.*
	Total fluid gain in tank for today is 4.3m ^{3} .

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY WORKOVER REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *29-Mar-04*	**SUPERVISOR:** *Mark Stocking*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:** *Petro Drilling Company Ltd.*	**REPORT No.:** *28*

WELL INFORMATION:			**SIZE**	**DEPTH**
SITP:	0 kPa	(0 psi)	**CASING:** *114mm*	*238.5 mKB (782 ft KB)*
SICP:	0 kPa	(0 psi)	**TUBING:** *60.3 EUE*	*197.3 mKB (647 ft KB)*
KB TO GL:			**BH TOOLS:**	
TD:			**PSN:**	
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**	
OPEN HOLE	*Plugged-Back*			
OTHER:				

SUMMARY OF OPERATIONS: *Swab tubing until rate became poor, circulate tubing to bottom of perfs, swab fluid from tubing.*

CURRENT STATUS & PLANS: *Swabbing back stimulation fluid.*

DETAILS OF OPERATIONS:

TIME	**REMARKS**
07:00	*Arrive on lease, R & R pressures (SITP=Nil, SICP=Nil)*
09:30	*Swab well, until the rate became poor, measure to total depth and tag bottom at 193.5m, met with operator, and made a decision to circulate tubing to bottom of perf interval. Disassemble swab tube/assembly, install tubing stripper on tubing head, and circulate down 1-9.6m joint, and 2 - pup joints (5.43m) and suspend in tubing head. Reassemble tubing swab/tube, and swab fluid from well until all of the circulation fluid was recovered, and continued to swab well, until an additional 1080 litres of of stimulation fluid had been recovered from well.*
19:00	*Shut down.*
	Total stimulation fluid recovered to date = 6.5m ^{3}.

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY WORKOVER REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *30-Mar-04*	**SUPERVISOR:** *Mark Stocking*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:** *Petro Drilling Company Ltd.*	**REPORT No.:** *29*

WELL INFORMATION:			**SIZE**	**DEPTH**
SITP:	0 kPa	(0 psi)	**CASING:** *114mm*	*238.5 mKB (782 ft KB)*
SICP:	0 kPa	(0 psi)	**TUBING:** *60.3 EUE*	*197.3 mKB (647 ft KB)*
KB TO GL:			**BH TOOLS:**	
TD:			**PSN:**	
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**	
OPEN HOLE	*Plugged-Back*			
OTHER:				

SUMMARY OF OPERATIONS: *Swab fluid from tubing, rig down, prepare for rig out.*

CURRENT STATUS & PLANS: *Rig released, monitor well, and consider options for recovery of remaining stimulation fluid*

DETAILS OF OPERATIONS:

TIME	**REMARKS**
07:00	*Arrive on lease, R & R pressures (SITP=Nil, SICP=Nil)*
	Swab well, rate is poor (< 10 litres per swab after an hour of swabbing)
12:00	*Operator made decision to release rig, and suspend operations, and consider other options for fluid recovery.*
	Made arrangement to have stimulation fluid in tanks removed from site and hauled away for disposal.
	Rig crew disassembled swab tools/tube, flow lines, and secured well head. There was 800 litres of tank gain today.
	Rig was prepared for rig out, and derrick was lowered for rig out.
15:30	*H. Gale arrived on site and lifted derrick off rig, and arrangements were made to load up remaining tubulars, and unused*
	materials tomorrow morning.
17:00	*Pardy vac unit arrived on site and loaded all recovered fluid from storage tanks.*
18:00	*Left well site, night watchman is on location prior to our departure.*
	Total stimulation fluid recovered to date = 7.3m ^{3} .

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY COMPLETION REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *11-Jun-04* = Date work Done	**SUPERVISOR:** *Bill Williams*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:**	**REPORT No.:** *1*

WELL INFORMATION:			**SIZE**	**DEPTH**
SITP:	Not Measured		**CASING:** *114mm*	*238.5 mKB (782 ft KB)*
SICP:	Not Measured		**TUBING:** *60.3 EUE*	*197.3 mKB (647 ft KB)*
KB TO GL:	1.3 m	(4 ft)	**BH TOOLS:**	
TD:			**PSN:**	
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**	
OPEN HOLE				
OTHER:				

SUMMARY OF OPERATIONS: *Prepare site for Installation of pumpjack and Storage tank. Offload equipment*

CURRENT STATUS & PLANS:

DETAILS OF OPERATIONS:

TIME	**REMARKS**
	Held prejob safety meeting piror to operation

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY COMPLETION REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *12-Jun-04* = Date work Done	**SUPERVISOR:** *Bill Williams*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:**	**REPORT No.:** *2*

WELL INFORMATION:			**SIZE**	**DEPTH**
SITP:	0 kPa	(0 psi)	**CASING:** *114mm*	*238.5 mKB (782 ft KB)*
SICP:	0 kPa	(0 psi)	**TUBING:** *60.3 EUE*	*197.3 mKB (647 ft KB)*
KB TO GL:			**BH TOOLS:**	
TD:			**PSN:**	
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**	
OPEN HOLE				
OTHER:				

SUMMARY OF OPERATIONS: *Assemble and install containment ring and liner for storage tank, set 210 bbl tank inside. Lay out discharge line*
Install radigan BOP's Make up downhole pump and run inside tubing with 5 sinker rods, 19 pump rods, 2 m pup joint and 1m pup join
Make up polish rod assembly and Seat pump in seat nipple

CURRENT STATUS & PLANS:

DETAILS OF OPERATIONS:

TIME	**REMARKS**

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY COMPLETION REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *13-Jun-04* = Date work Done	**SUPERVISOR:** *Bill Williams*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:**	**REPORT No.:** *3*

WELL INFORMATION:			**SIZE**	**DEPTH**
SITP:	0 kPa	(0 psi)	**CASING:** *114mm*	*238.5 mKB (782 ft KB)*
SICP:	0 kPa	(0 psi)	**TUBING:** *60.3 EUE*	*197.3 mKB (647 ft KB)*
KB TO GL:			**BH TOOLS:**	
TD:			**PSN:**	
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**	
OPEN HOLE				
OTHER:				

SUMMARY OF OPERATIONS: *Complete installation of 2" discharge ling from wellhead to storage tank. Install base for pumpjack. Install and align* pumpjack. Hook up electric motor and install drive belts. Install stairway on storage tank and over containment ring Wait on arrival of generator.

CURRENT STATUS & PLANS:

DETAILS OF OPERATIONS:

TIME	**REMARKS**

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY COMPLETION REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *14-Jun-04* = Date work Done	**SUPERVISOR:** *Bill Williams*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:**	**REPORT No.:** *4*

WELL INFORMATION:			**SIZE**		**DEPTH**
SITP:	0 kPa	(0 psi)	**CASING:**	*114mm*	*238.5 mKB (782 ft KB)*
SICP:	0 kPa	(0 psi)	**TUBING:**	*60.3 EUE*	*197.3 mKB (647 ft KB)*
KB TO GL:			**BH TOOLS:**		
TD:			**PSN:**		
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**		
OPEN HOLE					
OTHER:					

SUMMARY OF OPERATIONS: *Install injection pump and fittings. Wait on generator to 1200 hrs. Start pumpjack and pressure test well head* equipment to 500 psi. No leaks. Stop pumpjack and realign pulley assembly. Motor failed on start up. Sent motor for rebuild. Backload all excess equipment. Reshape berm around lease and install filter fabric at drain point.

CURRENT STATUS & PLANS:

DETAILS OF OPERATIONS:

TIME	**REMARKS**

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY COMPLETION REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *15-Jun-04* = Date work Done	**SUPERVISOR:** *Bill Williams*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:**	**REPORT No.:** *5*

WELL INFORMATION:			**SIZE**		**DEPTH**
SITP:	0 kPa	(0 psi)	**CASING:**	*114mm*	*238.5 mKB (782 ft KB)*
SICP:	0 kPa	(0 psi)	**TUBING:**	*60.3 EUE*	*197.3 mKB (647 ft KB)*
KB TO GL:			**BH TOOLS:**		
TD:			**PSN:**		
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**		
OPEN HOLE					
OTHER:					

SUMMARY OF OPERATIONS: *Wait on generator and motor to1800 hrs.Install generator. Start Pumpjack. Check operation. OK. Pumping at 2 SPM.*
t running overnight.

CURRENT STATUS & PLANS:

DETAILS OF OPERATIONS:

TIME	**REMARKS**

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

DAILY COMPLETION REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *16-Jun-04* = Date work Done	**SUPERVISOR:** *Bill Williams*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:**	**REPORT No.:** *6*

WELL INFORMATION:			**SIZE**		**DEPTH**
SITP:	0 kPa	(0 psi)	**CASING:**	*114mm*	*238.5 mKB (782 ft KB)*
SICP:	0 kPa	(0 psi)	**TUBING:**	*60.3 EUE*	*197.3 mKB (647 ft KB)*
KB TO GL:			**BH TOOLS:**		
TD:			**PSN:**		
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**		
OPEN HOLE					
OTHER:					

SUMMARY OF OPERATIONS: *Checked fluid level in tank. Recovered approx 9.5 bbls overnight which equals hole volume*
Tank guage in late afternoon indicate no more fluid being pumped. Will check in morning, then test pump if required. End of daily reporting for well.

CURRENT STATUS & PLANS:

DETAILS OF OPERATIONS:

TIME	**REMARKS**

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						

WEEKLY COMPLETION REPORT

COMPANY: *Vulcan Minerals Inc.*		
DATE: *21-Jun-04* End of Period	**SUPERVISOR:** *Bill Williams*	**LOCATION:** *Flat Bay #1*
AFE#:	**RIG No.:**	**REPORT No.:** *1*

WELL INFORMATION:			**SIZE**	**DEPTH**
SITP:	0 kPa	(0 psi)	**CASING:** *114mm*	*238.5 mKB (782 ft KB)*
SICP:	0 kPa	(0 psi)	**TUBING:** *60.3 EUE*	*197.3 mKB (647 ft KB)*
KB TO GL:			**BH TOOLS:**	
TD:			**PSN:**	
PBTD:	*230.0 mKB*	(755 ft KB)	**RODS:**	
OPEN HOLE				
OTHER:				

SUMMARY OF OPERATIONS: *Attempted to get pump working on a continuous basis. Unsuccessful.*

CURRENT STATUS & PLANS:

Waiting on Pump Repairs. - at least 1 week before resuming operations. Pump shipped June 21st.

DETAILS OF OPERATIONS:

DATE	**REMARKS**
June 17 '04	*Attempting to Pump Well*
June 18 '04	*Attempting to Pump Well Circulated with water and diesel through pump.*
June 19 '04	*Tapped Btm for 1 hr. Pump not working. Pulled Pump and Rods. Test Pump on Surface. Not Working. Prepare to ship to Sarnia.*
June 20 '04	*Package Pump for Shipping*
June 21 '04	*Ship Pump to Sarnia.*

FLUID TRANSFERS	**VOLUME**	**TO**	**LOAD FLUID LEFT TO RECOVER**

PREVIOUS CUM. COST	**CONTRACTOR**	**HOURS**	**COST**	**CONTRACTOR**	**HOURS**	**COST**
TOTAL DAILY COST						
TOTAL CUMULATIVE COST						