



FINAL WELL REPORT

Revision:	Version 1
Operating Company:	Vulcan Minerals Inc
Well Name:	Red Brook #1
Rig:	Ingersoll Rand RD10
Field:	Bay of St. George Basin
Location:	Western Newfoundland, Canada
Date:	5 January 2007
Revised On:	27 November 2008

Prepared by: Karla Metcalfe, P.Eng Vulcan Minerals	Reviewed by: Patrick Laracy, P.Geo Vulcan Minerals
Date:	Date:

Table of Contents

1	Introduction.....	1
2	General Information.....	1
3	Difficulties and Delays	2
3.1	Lost Circulation in Surface Hole Section	2
3.2	Fishing in Surface Hole Section	2
4	Drilling Operations	3
4.1	Elevation	3
4.2	Total Depth	3
4.3	Important Dates and Status	3
4.4	Hole Sizes and Depths	3
4.5	Bit Records.....	4
4.6	Casing Record	4
4.7	Cementing Record	4
4.8	Sidetracted Hole.....	4
4.9	Drilling Fluid	5
4.10	Fluid Disposal.....	5
4.11	Well Kicks	5
4.12	Formation Leak-Off Tests.....	5
4.13	Time Distribution.....	6
4.14	Deviation Plot	7
4.15	Plug & Termination Scheme.....	7
4.16	Well Schematic	7
4.17	Fluid Samples.....	7
4.18	Composite Well Record.....	7
5	Geology.....	8
5.1	Drill Cuttings	8
5.2	Cores	8
5.3	Lithology.....	8
5.4	Stratigraphic Column	8
5.5	Biostratigraphic Data	8
6	Well Evaluation	8
6.1	Downhole Logs.....	8
6.2	Other Logs	8
6.3	Synthetic Seismograms	8
6.4	Vertical Seismic Profiles.....	8
6.5	Velocity Surveys.....	8
6.6	Formation Stimulation	8
6.7	Formation Flow Tests	8



List of Appendices

APPENDIX A: WELL LOCATION & MAP

APPENDIX B: DRILLING PROGRAM APPROVAL AND AUTHORITY TO DRILL WELL

APPENDIX C: CEMENT PROPOSALS AND REPORTS

APPENDIX D: WELL TERMINATION RECORD & WELL SCHEMATIC

APPENDIX E: COMPOSITE WELL RECORD & TIME VERSUS DEPTH CURVE

APPENDIX F: DRILL CUTTINGS DESCRIPTION & LITHOLOGY

APPENDIX G: STRATIGRAPHIC COLUMN

APPENDIX H: EMPLOYEE BENEFITS SUMMARY

APPENDIX I: DAILY OPERATIONAL REPORTS

1 Introduction

Red Brook #1 was a hole drilled by the operator, Vulcan Minerals Inc., in the Bay of St. George Basin, Newfoundland. (See map in Appendix A). The purpose of this exploration well was to explore the commercial viability of potential hydrocarbon bearing formations in an anomaly identified through the use of geological and geophysical information recognized on proposed site.

The drilling rig used was the Ingersoll Rand RD10, a single-type rig with 210-hp (156-kW) rating and a 70000-lb (31750-kg) hookload.

The 186.5-m from rig floor (RF) vertical hole was drilled in accordance with the Drilling Program Approval #DPA2006-116-01 and Authority to Drill Well #ADW2006-116-01-01 under Permit #03-107 (see Appendix B).

The Red Brook #1 340-mm cellar casing was set at 10mRF with 5.0-m³ of cement for a good shoe to hold back the overburden. The 311-mm hole was drilled to 107-m. Then the 244.5-mm casing was set to 86-m and cemented into place with cement to surface. The surface hole was drilled with a 215.9-mm BHA to 186.5-mRF where water zone influx prevented the continuance of drilling. The 245-mm casing was run to 180-mRF and cemented into place with cement to surface through the use of the primary cementation in addition to two cement top jobs. Blow out preventers were nipped up and hi-low pressured tested against surface casing. Formation integrity test was executed at 180-m resulting in a calculated pressure gradient of 10-kPa/m. The highly fractured zone at the point of the 245-mm casing shoe, in addition to winter conditions, prevented the continuation of the drilling of Red Brook #1 to target depth in an economical manner. It was decided to suspend the well in a way that Vulcan Minerals may either reenter or abandon the well by simply cutting all casing at a point one meter below ground level. The well was then plugged back with two cement plugs and terminated.

2 General Information

Well Name	Red Brook #1
Exploration Permit	03-107
Drilling Program Approval	DPA 2006-116-01
Authority to Drill Well	ADW 2006-116-01-01
NAD 27 Coordinates	N 5347384.854 E 370116.036
Survey System	Differential Survey Related To C.M. 84G4163

See Appendix A for Legal Survey completed by R. Davis Surveys Ltd.

3 Difficulties and Delays

3.1 Lost Circulation in Surface Hole Section

While drilling the surface hole section, a highly fractured zone was encountered between the depths of 149 and 186.5-meters. Healing this zone in small increments (generally each meter), through the use of both lost circulation material and cement plugs, enabled drilling of the interval. Total volume pumped was approximated at 60-m³ and total non-productive time for this delay was 221.75-hours.

3.2 Fishing in Surface Hole Section

While reaming the lost circulation material at the depth of 148.5m (total depth was 152m) the drill string twisted off at the depth of 37.25-m. The fishing tools that consisted of 206.4-mm (8.125-in) overshot with a basket grapple for the body of the 114.3-mm (4.5-in) drill pipe. The overshot engaged the fish and pulled to surface without any overpull. Total non-productive time for this delay was 48.50-hours.

4 Drilling Operations

4.1 Elevation

Well Name	Red Brook #1
Ground Level	56.44-m MSL
Casing Flange	Not Applicable
Rig Floor	+3.3-m from ground level

4.2 Total Depth

Well Name	Red Brook #1
Total Drilled Depth	186.5-mRF
Logged Depth	N/A
Plugged-Back Depth	13-m

4.3 Important Dates and Status

Well Name	Red Brook #1
Rig Mobilization	18 November 2006
Drilling Commencement	24 November 2006
Spud	27 November 2006
Drilling Completed	16 November 2006
Rig Release	18 December 2006
Well Status	Suspended

4.4 Hole Sizes and Depths

Well Name	Red Brook #1
311.1-mm Hole	107-mRF
215.9-mm Hole	186.5-mRF

4.5 Bit Records

Red Brook #1								
Bit Number	Size [mm]	Type	Depth In [mRF]	Depth Out [mRF]	Meterage [m]	Hours [h]	ROP [m/h]	Pulled Condition
1	216	Security J-22	107	152	45	23	1.96	Seals Failed
2	216	REED 38E	152	166	14	5	2.80	Good
2RR	216	REED 38E	166	170	4	3.25	1.23	Good
2RR2	216	REED 38E	170	184.5	15	8.75	1.66	Good
2RR3	216	REED 38E	184.5	186.5	2	0.75	2.67	Good

4.6 Casing Record

314-mm cellar line pipe was installed at 9.1-mRF.

Well Name	Red Brook #1	
Casing Type	Conductor	Surface
Casing Size [mm]	244.5	177.8
Weight [kg/m]	53.6	25.33
Grade	J-55	H-40
Number of Joints	17	18
Connection Type	8Rd Short	8Rd Short
Depth of Shoe [mRF]	86	180
Casing Hanger and Seal	N/A	Casing Head Type W

4.7 Cementing Record

Well Name	Red Brook #1	
Casing Size [mm]	244.5	177.8
Centralizer Spacing		One per joint
Slurry Volume [m ³]	5.0	5.0
Slurry Density [kg/m ³]	1820	1820
Cement Class	A	A
Cement Additives	1-liter Grace Adva 100 per m ³ slurry	1-liter Grace Adva 100 per m ³ slurry 6.8-kg Barolift per m ³ slurry
Cement Top [mRF]	3.3	3.3
Cement Base [mRF]	86	180
Basis of Top Estimate [Calc/CBL]	Visual	Visual

See Appendix C for cement proposals and reports.

4.8 Sidetracked Hole

Not applicable.

4.9 Drilling Fluid

The 311.1-mm conductor hole section was drilled with Federal Supreme gel water and soda ash with final properties that included mud weight of 1050-kg/m³, funnel viscosity 48-sec and 8pH.

The 215.9-mm surface hole section was drilled with fluid to 186.5-m. The gel mud was comprised of Federal Supreme gel for borehole stability, soda ash for pH properties, poly plus for viscosity, Quik-seal, celluflake and sawdust for lost circulation material. The final properties included mud weight of 1080-kg/m³, funnel viscosity 70-sec and 10.5pH.

4.10 Fluid Disposal

While drilling the surface hole section of the Red Brook #1 hole, the well encountered lost circulation at a depth of 149-m. The hole was incrementally cured prior to continuing to drill by pumping LCM pills that contained saw dust, Celluflake and Kwik Seal or class A cement plugs. The total drilling fluid lost was approximated at 60m³.

4.11 Well Kicks

Not applicable.

4.12 Formation Leak-Off Tests

Formation integrity test was executed on Red Brook #1 at 180-m with 1040-kg/m³ mud weight to 0-kPa for a calculated pressure gradient of 10.2-kPa/m.

4.13 Time Distribution

Operation Type	Cumulative Time [hrs]	Cumulative Time [%]
Rig Up / Tear Out	10.75	2.1%
Drill with Fluid	40.75	8.1%
Drill with Air	0	0.0%
Reaming	3.5	0.7%
Coring	0	0.0%
Ream Rathole	6.75	1.3%
Condition & Circulate Mud	21.75	4.3%
Tripping	98.75	19.5%
Mix Drilling Fluid	23.75	4.7%
Rig Service	13.75	2.7%
Survey	0.5	0.1%
Logging	0	0.0%
Run Casing	7.5	1.5%
Cementing	6.5	1.3%
Wait on Cement	94	18.6%
Nipple Up/Down BOPs	7.5	1.5%
Test BOPs	7	1.4%
Drill out Cement	8	1.6%
Drill Stem Test	0	0.0%
Handle Tools	1.5	0.3%
Plug Back	4.5	0.9%
Fishing	6.5	1.3%
Work Pipe	0	0.0%
Mix Lost Circulation Material	71.5	14.1%
Safety Meeting	1	0.2%
BOP Drill	0.25	0.0%
Clean out Tanks	3	0.6%
Shut Down for Night	0	0.0%
Waiting on Materials	38.5	7.6%
Waiting on Services	16.5	3.3%
Waiting on Orders	5	1.0%
Pressure Integrity Test / Leak Off Test	0	0.0%
Make up Wellhead	7	1.4%
Total Operational Time	506.00	100.0%
Total Non-Productive Time	303.5	60.0%

4.14 Deviation Plot

A deviation survey was completed at approximately every 150-m.

Depth	Deviation	Maximum	Cumulative	Measurement Tool
		Horizontal Drift	Deviation	
141-m	1.00°	2.46-m	1.00°	Totco

4.15 Plug & Termination Scheme

Well Name	Red Brook #1
Cement Plug #1	1.7-m ³ Class A 1820-kg/m ³ cement from 180-mRF to 145-mRF.
Fluid Above Plug #1	1080-kg/m ³ drilling fluid
Cement Plug #2	0.35-m ³ Class A 1820-kg/m ³ cement from 28-mRF to 13-mRF.
Fluid Above Plug #2	1080-kg/m ³ drilling fluid
Well Status	Abandoned

4.16 Well Schematic

See Appendix D for well termination reports and well schematics.

4.17 Fluid Samples

Not applicable.

4.18 Composite Well Record

See Appendix E for composite well record and detailed time versus depth curve.

5 Geology

5.1 *Drill Cuttings*

See Appendix F geological report completed by Jeffrey Hearn.

5.2 *Cores*

Not applicable.

5.3 *Lithology*

See Appendix F geological report completed by Jeffrey Hearn.

5.4 *Stratigraphic Column*

See Appendix G.

5.5 *Biostratigraphic Data*

Not applicable.

6 Well Evaluation

6.1 *Downhole Logs*

Not applicable.

6.2 *Other Logs*

Not applicable.

6.3 *Synthetic Seismograms*

Not applicable.

6.4 *Vertical Seismic Profiles*

Not applicable.

6.5 *Velocity Surveys*

Not applicable.

6.6 *Formation Stimulation*

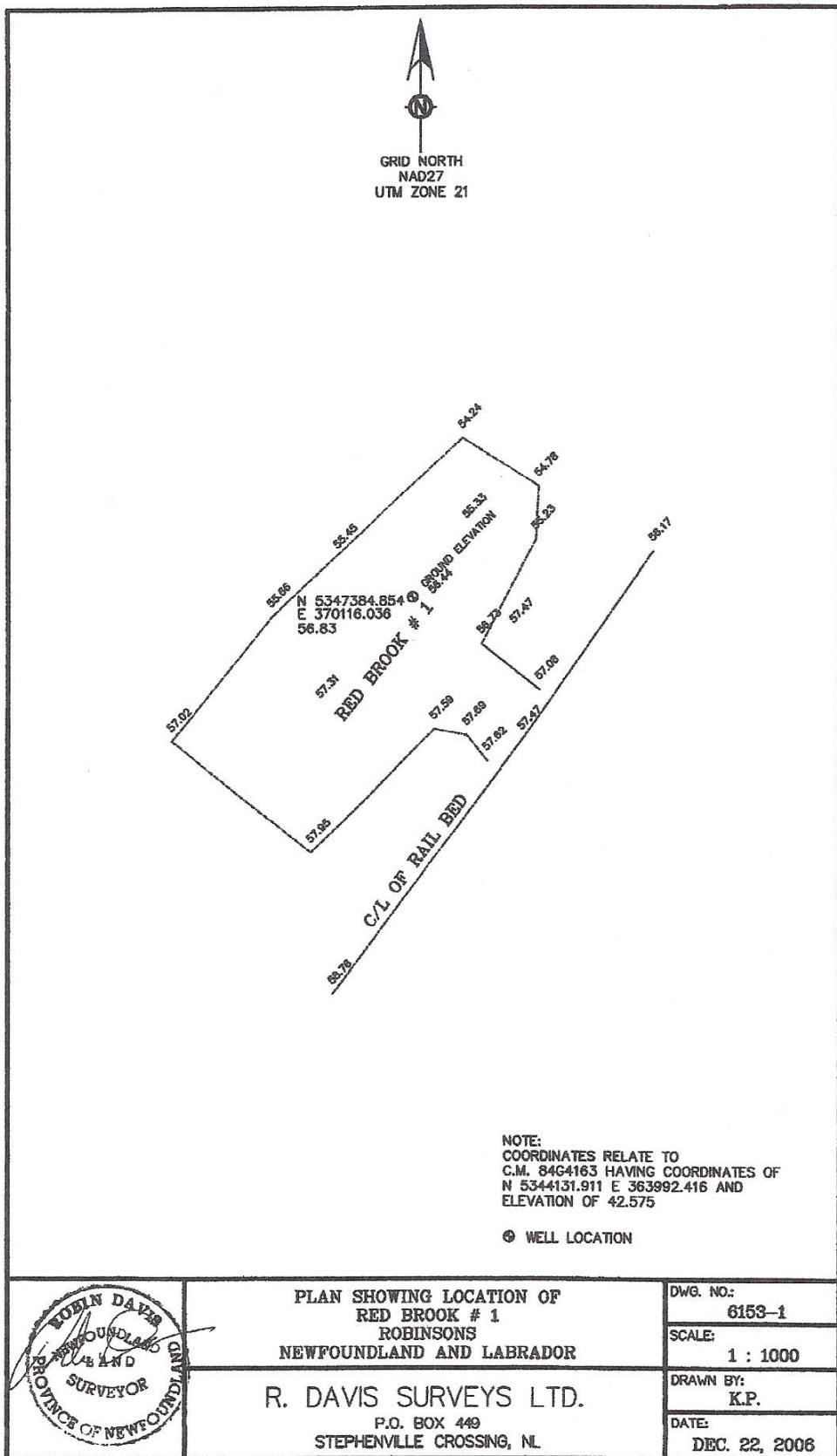
Not applicable.

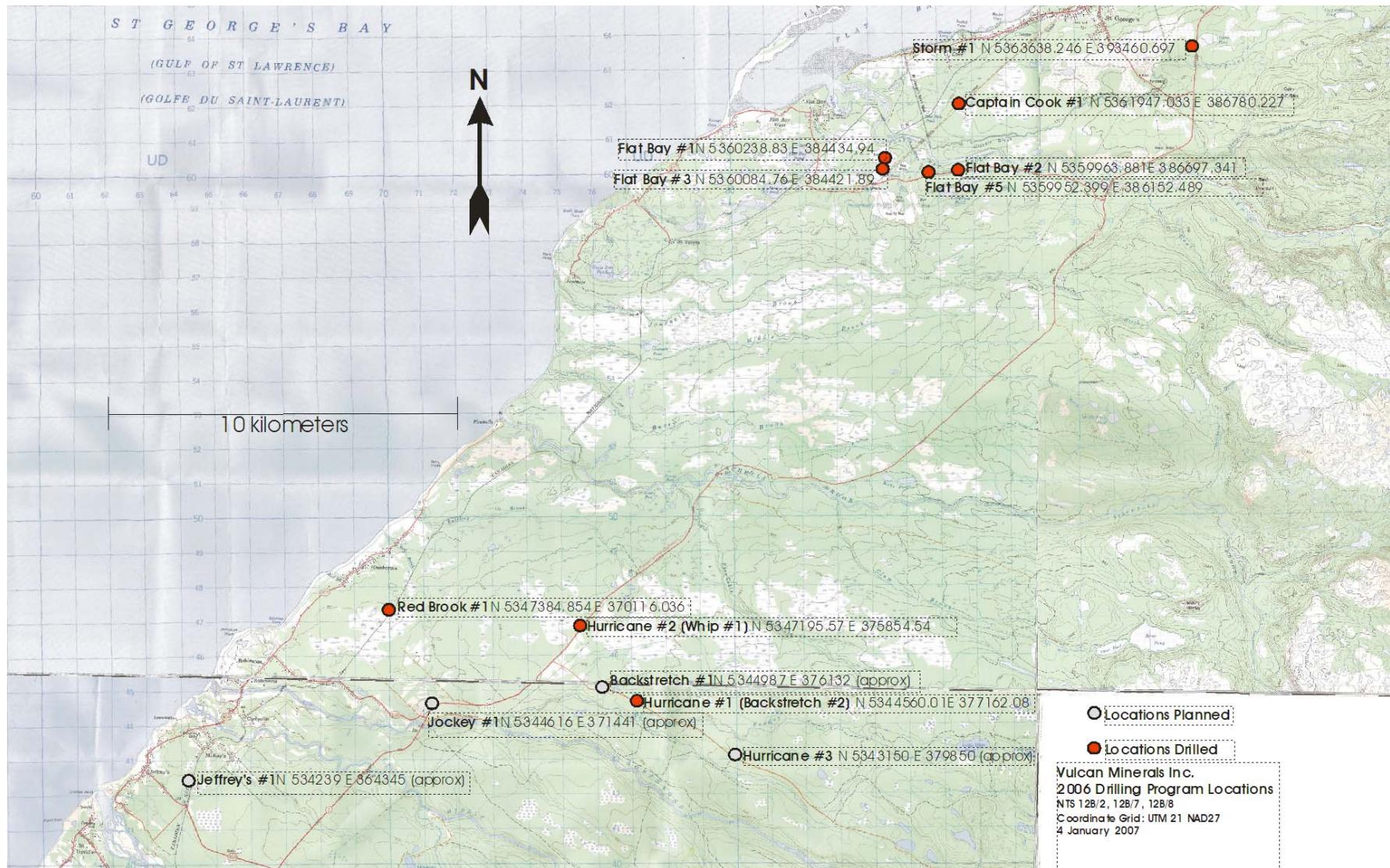
6.7 *Formation Flow Tests*

Not applicable.



APPENDIX A: WELL LOCATION & MAP







APPENDIX B: DRILLING PROGRAM APPROVAL AND AUTHORITY TO DRILL WELL

GOVERNMENT OF NEWFOUNDLAND AND LABRADeR
Department of Natural Resources, Energy Branch

DRILLING PROGRAM APPROVAL - APPLICATION

Pursuant to sections 8 and 9 of the *Petroleum and Natural Gas Act*¹, Vulcan Minerals Inc.,
as operator on behalf of Vulcan Minerals Inc., holding a
subsisting licence, permit or lease issued pursuant to the *Petroleum Regulations*², namely, 96-105103-10603-107
(*licence, permit, or lease #*)
hereby applies for approval to conduct a drilling program using the drilling rig Ingersoll Rand RD10
and equipment and procedures described in the detailed program dated 19 September 06.

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

Signed: Patricia Harvey
Operator's Representative

APPROVAL

Pursuant to sections 8 and 9 of the *Petroleum and Natural Gas Act*, the operator named in the Application is hereby
authorized to conduct the proposed drilling program subject to the following conditions:

1. This Drilling Program Approval shall, unless otherwise extended or terminated, expire upon the 30 day of
Sept. 2007;
2. This Authorization shall be prominently displayed at the well site at all times during which operations are being
conducted;
3. Evidence of financial responsibility, as required pursuant to Section 14 of the *Petroleum Drilling Regulations*³,
shall be provided by the operator to the Minister of Natural Resources;
4. The operator shall use the equipment and procedures described in the detailed program dated 19 September 2006
unless a change in the equipment or procedures is approved in writing by the Director; and
5. The operator shall comply with such other conditions as are appended to this Approval.

Signed: R. Tolson
Director

Effective Date: October 16, 2006

Drilling Program Approval No. 2006-116-01

¹ R.S.N. 1990, c. P-10

² CNR 1151/96

³ CNR 1150/96

 GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Natural Resources, Energy Branch

AUTHORITY TO DRILL A WELL - APPLICATION

Pursuant to sections 8 and 9 of the *Petroleum and Natural Gas Act*¹ and in compliance with section 29 of the *Petroleum Drilling Regulations*², Vulcan Minerals Inc., an operator, hereby applies for Authority to Drill a Well to be known as Red Brook #1, using the equipment and procedures described in the well program dated 22 Sept 2006 using the equipment and procedures described in the well program dated 08-107. Permit, License or Lease to which this Program applies:

Area: <u>Western Newfoundland</u>	CO-ORDINATES		
Field/Pool: <u>Bay of St. Georges</u>	Long:	UTM (NAD 27) Northing: <u>5347345 m</u> Easting: <u>370135 m</u>	
Drilling Rig: <u>Ingersoll Rand 10010</u>	ELEVATION		
Rig Type: <u>Single Hydraulic</u>	DEPTH		
Drilling Contractor: <u>Vulcan Minerals</u>	RTK/GPS/RF: GL:	T.D.: <u>1000 m</u> TVD: <u>1000 m</u>	
ESTIMATES		TARGET HORIZONS	
Spud Date: <u>1 October 2006</u>	Well Cost: <u>\$700,000</u>	<u>Anguille Conglomerate/Sands</u>	
Days on Location: <u>20</u>			

Ten-metre sample intervals: <u>During high ROP rates</u>	Conventional cores at: <u>N/A</u>
Five-metre sample intervals: <u>60m - 1000 m</u>	Logs and Tests: <u>WTB Neutron, HDI, Density, GR, Acoustic, Caliper</u>
Canned sample intervals: <u>N/A</u>	

CASING AND CEMENTING PROGRAM

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m)	Cementing Program
271.5	53.6	J-55	60	Class A
177.8	25.3	H-40	250	Class A
114.3	19.1	J-55	1000	Class A
Other Equipment:				
<u>21 MPa, 180° rotating headland annular preventer</u>				

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: Fayth Harvey
Operator's Representative

Date: Sept 22/06

AUTHORIZATION

Whereas the Minister of Natural Resources 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 log and well test data shall be submitted to the director by the operator promptly after their acquisition;
3. The operator shall comply with all conditions of the Drilling Program Approval No. 2006-116-01 under which the above well is to be drilled;
4. No change in the well program hereby approved may be made unless it is first approved by the director in writing;
5. This Authorization is conditional on the operator commencing drilling within 120 days of the effective Authorization date; and
6. The operator shall comply with such other conditions as are appended to this Authorization.

Signed: T. Tolmie
Director

Effective Date: October 16, 2006

Authority to Drill a Well No. 2006-116-01-01



APPENDIX C: CEMENT PROPOSALS AND REPORTS



SURFACE CASING CEMENTATION PROGRAM

Revision:	Version 0
Operating Company:	Vulcan Minerals Inc
Hole Name:	Red Brook #1
Rig:	Ingersoll Rand RD10
Field:	Flat Bay
Location:	St. Georges Bay, Western Newfoundland, Canada
Date Issued:	12 December 2006

Purpose

This cement program is to create an adequate seal around the 178mm surface casing in order to continue drilling the well to total depth.

The cement pump to be used is the Bean V65 dual pump rated to 8275-kPa (1200-psi) and 300-l/min (79-gal/min).

Owner and Operator's Name

Vulcan Minerals Inc.

Contact Person for Licence

Patrick Laracy
Vulcan Minerals
333 Duckworth Street
St. John's, NL A1C 5G1
Tel: 709 754 3186
Fax: 709 754 3946

Drilling Contractor

Vulcan Minerals
333 Duckworth Street
St. John's, NL A1C 5G1
Tel: 709 754 3186
Fax: 709 754 3946

On-Site Representation

Bill Williams	Karla Smith, P.Eng
Cell: 709 689 6973	Project Manager
	Vulcan Minerals
	Cell: 709 746 2424

Timing

The proposed cement program is estimated to occur on December 12, 2006.

Cement Operations Program

Casing Properties

Casing	244.5mm (9 5/8-in)	177.8mm (7-in)
Depth	86.5-m (284-ft)	180-m (590-ft)
Weight	53.6-kg/m (36-lb/ft)	25.3-kg/m (17-lb/ft)
Grade	J-55	H-40
Connection	8rd LTC	8rd STC
Collar OD	10.625-in	7.656-in
Casing Drift ID	8.765-in	6.413-in
Nominal ID	8.921-in	6.538-in

Pumping Volumes

Section	Capacity	Volume (0% Excess)	Volume (150% Excess)
Annular – Casing to Casing	0.0155 m ³ /m	1.29 m ³	1.29 m ³
Annular – Casing to Open Hole	0.0118 m ³ /m	1.11 m ³	2.73 m ³
Shoetrack – 45m	0.0217 m ³ /m	0.97 m ³	0.97 m ³
Casing (Displacement)	0.0217 m ³ /m	2.92 m ³	2.92 m ³
Total Cement Volume	3.37 m³	4.99 m³	

Cement System

Additives	Concentration
Class A Cement	
+ Grace Adva 100 (Properties: decrease viscosity and thickness without compromising cement strength and anti-foam agent)	1-liter per m ³ slurry
Density	1821-kg/m ³ (15.2-lb/gal)
Fluid Base	611-litre of fresh water for 1217-kg cement

Tested Cement Strength: 21.7-MPa

Cement additives including MI Celloflake and Halliburton Barolift are on site in the case that lost circulation materials are required while cementing.

177.8mm Casing Cementation Operations

1. Ensure casing is run with sufficient centralization (1 centralizer every 2 casing joints).
2. Check mud pump efficiency and open hole excess requirement.
3. Rig up cementing equipment.
4. Conduct Safety and Procedures meeting with all personnel on location.

Date Issued: 12 December 2006

2

Revised Date:

5. Pressure test treating lines to anticipated maximum surface pressure of 1000-kPa (note cement plug will be bumped with rig pump).
6. Prepare to conduct cement job.
7. Pump 0.5m³ of freshwater spacer.
8. Pump pre-mix cement (estimated 5.00 m³ with shoe at 180-m, 3-m rig elevation to ground level, and 150% excess required) at a rate of approximately 0.3-m³/min. Collect at least 3 samples of pre-mixed cement at regular intervals of the pumping operation.
9. Drop 177.8mm solid top plug.
10. Chain down casing or hold down casing with topdrive to prevent floatation.
11. Displace cement with required volume fluid (estimated 2.92 m³ assuming shoe at 180-m and 45-m shoe track) at a rate of 0.6-m³/min assuming 95% pumping efficiency.
12. For the last 0.5m³ of displacement with water, slow pumping by idling the triplex pump and land plug a minimum of 2000-kPa over the final pumping pressure. Collect samples of cement returns and label.
13. Bleed pressure off and ensure that the float is holding.
14. Rig down cementing equipment.

Contingency for 177.8mm (7-in) Intermediate Casing

Plug Does Not Bump

The scenario that the plug does not bump, displace the casing as per cement program. **Never** over displace the casing in order to bump the plug.

Back Flow After Bumping Plug

After successfully bumping the plug, pressure shall be released and backflow measured. If there is indication that the float did not hold, then pressure shall be returned such to stop the backflow while waiting on cement.

No Cement to Surface

In the case that there is no cement to surface, then a top up job on the backside of the 177.8mm (7-in) casing shall be completed with 1" pipe.



APPENDIX D: WELL TERMINATION RECORD & WELL SCHEMATIC



Government of Newfoundland and Labrador
Department of Natural Resources
Energy Branch

WELL TERMINATION RECORD

WELL DATA

Well Name:	Red Brook #1			CO-ORDINATES						
Operator:	Vulcan Minerals Inc.			Long:				UTM (NAD 27)		
Drilling Rig:	Ingersoll Rand RD10			Lat.:				Northing: 5347384.854m		
Rig Type:	Single Hydraulic			ELEVATION						
Drilling Contractor:	Vulcan Minerals Inc.			<input type="checkbox"/> RT	<input type="checkbox"/> KB	<input checked="" type="checkbox"/> RF	<input type="checkbox"/> m	M.D.:	186.5m	
Spud Date:	November 27, 2006			G.L.:	58.44m			T.V.D.:	186.5m	
T.D. Date:	December 10, 2006			FOR NR USE ONLY						
Rig Release Date:	December 18, 2006			For the purpose of interpreting subsection 154 (5) of the Petroleum Drilling Regulations, the rig release date is deemed to be:						
Well Termination Date:	December 18, 2006			December 18, 2006						
Purpose of Termination:	<input checked="" type="checkbox"/> Suspension		<input type="checkbox"/> Abandonment	<input type="checkbox"/> Completion	Other: _____					

CASING AND CEMENTING PROGRAM

O.D. (mm)	WEIGHT (kg/m)	GRADE	SETTING DEPTH (m)	CEMENTING DETAILS	
244.5	53.6	J-55	86.5m	5.0m ³ class A 1820-kg/m ³ cement, cement returns	
177.8	25.6	H-40	180m	5.0m ³ class A 1820-kg/m ³ cement, no cement returns, two top jobs	

PLUGGING PROGRAM

Approval of the following program was obtained by (person) Karla Metcalfe
from (person) Joe Gorman of the Department of Natural Resources by means of
Telephone Conversation dated December 16, 2006

Type of Plug	Interval	Felt/Pressure Tested	Cement and Additives
Cement	180-145m	Felt	Two stage, each 0.85m ³ class A 1820-kg/m ³ cement
Cement	28-15m	none	0.35m ³ class A 1820-kg/m ³ cement

Lost Circulation/Overpressure Zones: Lost circulation encountered between 149m and 186.5m

Downhole Completion/Suspension Equipment (Describe Below and Attach Sketch of Wellbore)

Name	<u>Patrick Laracy</u>	Title	<u>President</u>
Signed	<u>Patrick Laracy</u>	Date	<u>Dec 22/06</u>

DECLARATION

The undersigned **OPERATOR'S REPRESENTATIVE** hereby declares that on the basis of personal knowledge of operations undertaken at the above named well, the above information is true, accurate and complete.

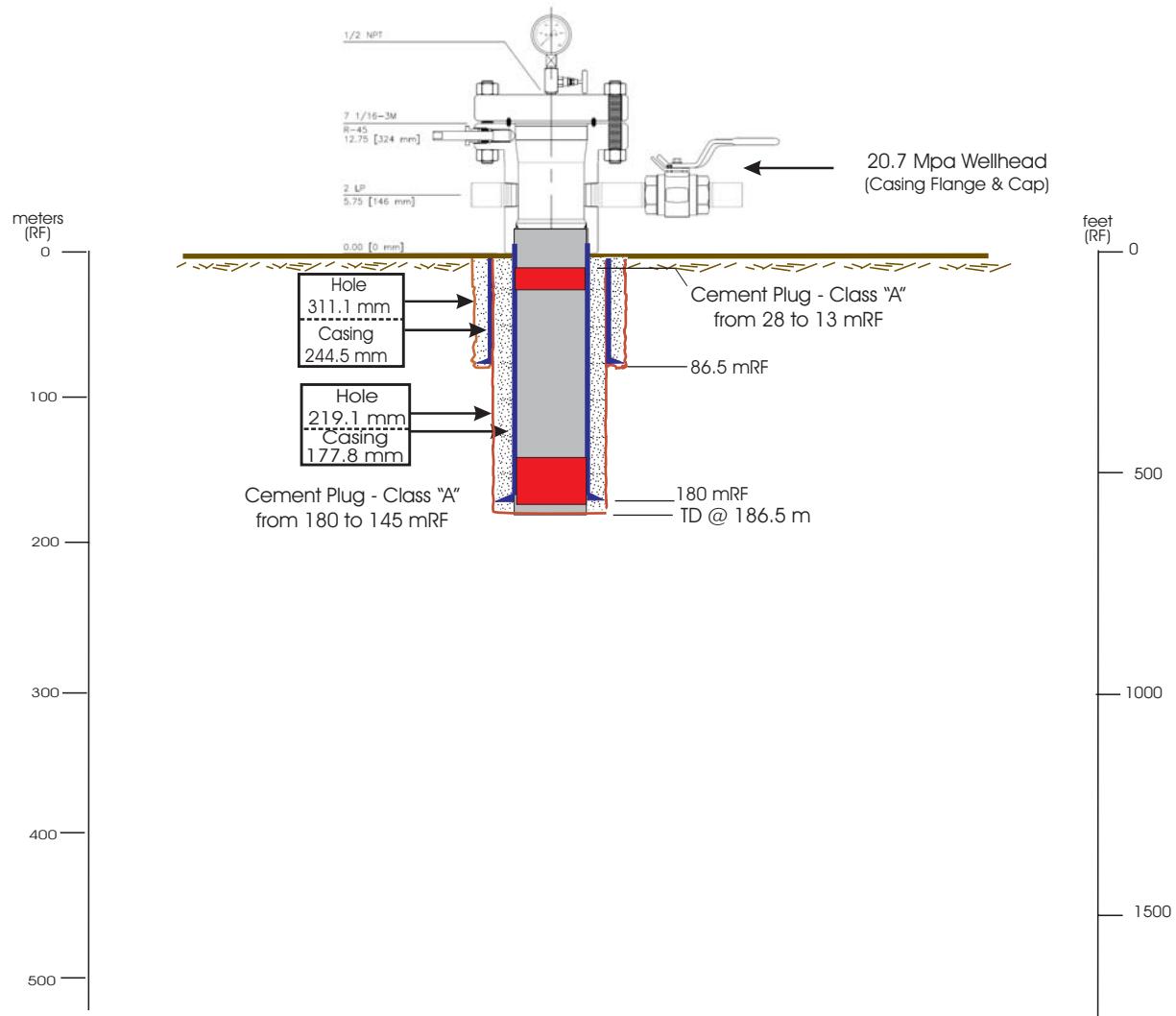
Name Patrick Laracy
Signed Patrick Laracy

Title President
Date Dec 22/06

ACKNOWLEDGEMENT

Acknowledged by: W. Postle
Director

Date: Jan. 5/07



Suspension Operations
Dec 18th, 2006



Vulcan Minerals Inc.
Red Brook #1
Suspension Configuration

Scale: 1 : N/A

Drawn by: K. Smith
Date: 120 Dec 2006

Drawing No: Rb1 - SUSP
Rev: 0



APPENDIX E: COMPOSITE WELL RECORD & TIME VERSUS DEPTH CURVE

Red Brook #1 Exploration Well, November-December 2006

Position: projection NAD 27: 370116.036-mE, 5347384.854-mN, GL + 56.44-m, RF = + 3.3-mGL

All depths are MD RF

Depth	Lithology	Lithology	ROP			Casing Scheme	Drilling Data			DF & Cementing			Remarks
			Gas Curve	0 ROP (min/m)	10		Deviation:	Bit:	BHA:	Comments:	Drilling Fluid:	Cement:	
Description	Column	Gas (%)	0	1									
0													
25	Overburden	0m to 86m											
50													
75													
100	Sandstone	86m to 123m											
125	Andydrite	123m to 165m											
150													
175	Sandstone	165m to 186.5m											
200													
225													
REMARKS: Licence 03-107 Spud Date: Nov 27, 2006 @ 08:30 Rig: Vulcan Minerals Inc. Ingersoll Rand RD-10 Total Operational Hours: 506.00 Percentage Operational NPT: 60.0%													

244.5-mm 53.6-kg/m @ 86-m

177.8-mm 25.33-kg/m H-40 8Rd Short @ 180-m

1.00° @ 141-m Totco

#1. 107-m to 152-m 215.9-mm Security J-22;
meterage: 45-m; 23-hrs; ROP: 1.96-m/h; RPM 80;

Bit: 10m,
Stabilizer:
4.86 m,
120.65mm
DC 9.14m

* Lost circulation zone at 149-m

#2. 107-m to 152-m 215.9-mm Security J-22;
meterage: 45-m; 23-hrs; ROP: 1.96-m/h; RPM 80;

* Twist off drill pipe at 37.25-m (TD 152m).
Retrive fish with overshot on first attempt.

#2RR. 107-m to 152-m 215.9-mm Security J-22;
meterage: 45-m; 23-hrs; ROP: 1.96-m/h; RPM 80;

* Pump cement plug #1 5m³ of 14.5 ppg cement
at 86m (TD 166m) Drill out cmt from 149-155m
* Pump cement plug #2 2m³ of 14.5 ppg cement
at 160m (TD 166m) Drill out cmt from 153-166m

#2RR2. 107-m to 152-m 215.9-mm Security J-22;
meterage: 45-m; 23-hrs; ROP: 1.96-m/h; RPM 80;
#2RR3. 107-m to 152-m 215.9-mm Security J-22;
meterage: 45-m; 23-hrs; ROP: 1.96-m/h; RPM 80;

* Pump cement plug #3 3m³ of 14.5 ppg cement
at 83m (TD 170m) Drill out cmt from 165-170m
* Pump cement plug #4 4m³ of 14.5 ppg cement
at 169m (TD 184.5m) Drill out cmt from 159-184.5m

Type: Federal
Supreme gel water:
MW 1050-kg/m³;
Funnel Vis 48-sec;
pH 8

One stage cement job. Pump 0.5-m³ H₂O preflush. Pump 5.0-m³
Class A 1820 kg/m³ cement
slurry.

* 100% open hole excess
* 0.5-m³ cement returns at cellar
* Tag TOC at 50-m

* Cementation by Vulcan Minerals

* 215% open hole excess
* No cement returns

* Top Job #1 2-m³ 1800-kg/m³ class A

* Top Job #2 0.75-m³ 1800-kg/m³ class A

* Cement to surface w/ 2nd top job

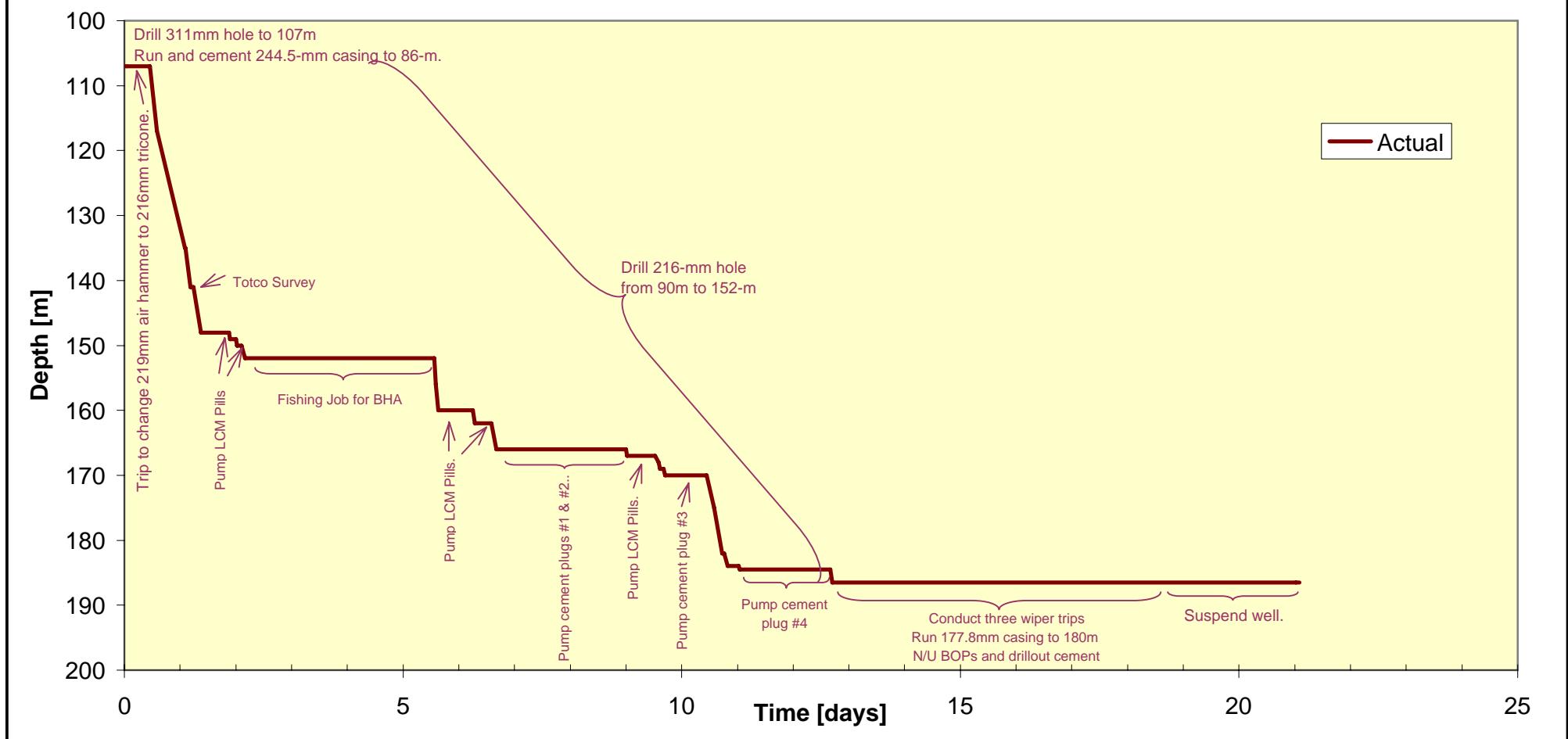
* Tag TOC at 149-m

Cement Plug #1 at depth of 180-m. Pump cumulative of 1.7-m³
class A 1820-kg/m³ cement, spotting plug 180-m to 145m.

Cement Plug #2 at depth of 28-m. Pump 0.35-m³ class A 1820-kg/m³ cement, spotting plug 28-m to 13-m.

Red Brook #1 did not reach primary or secondary target zones due to highly fractured formations.

VULCAN minerals inc	Operating Company Well Name Rig Field	Vulcan Minerals Red Brook #1 Ingersoll Rand RD10 St.Georges	Mob Start Spud Date Rig Release Demob End	18-Nov-06 27-Nov-06 18-Dec-06 21-Dec-06
-------------------------------	--	--	--	--



Total Non-Productive Time **60.0%**



APPENDIX F: DRILL CUTTINGS DESCRIPTION & LITHOLOGY



VULCAN MINERALS INC.

GEOLOGICAL REPORT

VULCAN RED BROOK #1 2006-03-107

SURFACE CO-ORDINATES Northing: 534384.854 Easting: 370116.036.036



Prepared for: **Patrick Laracy P.GeoI**

Prepared by: **Jeffrey Hearn B.Sc**

WELL DATA SUMMARY

Well Name: VULCAN RED BROOK #1 2006-03-107

Surface Co-ordinates Northing: 534384.854 Easting: 370116.036.036

Licence #: 2006-03-107

Licensee: VULCAN MINERALS INC. Field Name: Red Brook

Elevation: Ground: 56.44 m
Kelly Bushing: 59.77 m

Contractor: VULCAN INGERSOLL RAND RD10

Spud Date: 11/24/2006

Hole Size: Surface: 216.00 mm
Main: mm

Surface Casing: Set at 180.00 m K.B. 177.8
Drilled Out: 12/20/2006

Production Casing: mm Kg/m

Well Status: Well Suspended 186.5m KB 12/19/2006

Ditch Samples: 5m samples Caught from 80m to 186.5

VULCAN RED BROOK #1 2006-03-107

GEOLOGICAL MARKERS

<u>Formation</u>	<u>K.B. ELEVATION:</u>	59.77 m
	<u>Sample Depth (m)</u>	<u>Sample Subsea (m)</u>
Bedrock	86.00	26.23

DAILY PROGRESS SUMMARY REPORT

GEOLOGIST: Jeffrey Hearn B.Sc
WELL NAME: VULCAN RED BROOK #1 2006-03-107
LOCATION: Northing: 534384.854 Easting: 370116.036.036
OPERATOR: VULCAN MINERALS INC.

80 - 85 SANDSTONE: red to orange, 100% clear and frosted quartz, predominantly unconsolidated fine to medium, poor sorted, a to r, green, occasional mudstone, predominant argillaceous cement, poor to fair intergranular porosity, no show.

85 - 90 SANDSTONE: red to orange as above, 100% clear and frosted quartz, predominantly unconsolidated, fine to coarse, poor sorted, a to r, occasional red to green chert, rare micaceous claystone stringers; good visible porosity in clean samples, no show.

90 - 95 SANDSTONE: red to orange, 100% clear and frosted quartz, predominantly unconsolidated lower medium to very coarse, moderately to well sorted, a to r, common orange to green chert, rare dolomite, poor to fair intergranular porosity, no show.

95 - 100 SANDSTONE: red to orange 100% clear and frosted quartz, predominantly unconsolidated lower medium to upper coarse, as above.

100-105 SANDSTONE: red to orange, 100% clear and frosted quartz, predominantly unconsolidated upper medium to upper very coarse, trace lower fine to lower medium, moderately to well sorted, poor to fair intergranular porosity, no show.

105-110 SANDSTONE: red to orange, 100% clear and frosted quartz, occasional red to orange chert, predominantly unconsolidated, upper fine to upper medium, occasional very fine to lower fine, well sorted, sub angular to sub rounded, occasional angular, predominant red argillaceous cement, poor to fair intergranular porosity, no show.

110-115 SANDSTONE: red to orange, 100% clear and frosted quartz, occasional orange to grain chert, predominantly unconsolidated, upper fine to upper coarse, moderately to well sorted, sub angular to sub rounded, as above.

115-120 SANDSTONE: red to orange, 100% clear and frosted quartz, occasional orange to grain chert, predominantly unconsolidated, upper fine to upper coarse, moderately to well sorted, sub angular to sub rounded, predominant argillaceous cement, occasional

calcareous poor to fair intergranular porosity, no show.

120-125 GYPSUM/ ANHYDRITE: 95% predominantly selenite, occasional alabaster, clear – transp, occasional very light gray and massive; SILTSTONE to VF
SANDSTONE: as above.

125-130 GYPSUM/ ANHYDRITE: 100% predominantly selenite, occasional alabaster, anhydrite predominantly clear to transp very light gray and massive.

130-135 GYPSUM: 100% selenite to alabaster.

135-140 GYPSUM: 90% predominantly selenite, rare alabaster; ANHYDRITE: 10% anhydrite predominantly very light gray, massive.

140-145 GYPSUM: 90% selenite, rare alabaster; ANHYDRITE: 10% anhydrite predominantly very light gray, massive, trace to minor halite.

145-150 GYPSUM: 100% selenite, rare alabaster (urbanite discluded though majority of sample)

150-155 GYPSUM: 90% selenite, rare alabaster; ANHYDRITE: 10% anhydrite predominantly very light gray, massive.

155-160 GYPSUM: 90% selenite, rare alabaster; ANHYDRITE: 10% anhydrite predominantly very light gray, massive, trace to minor halite.

160-165 SANDSTONE: red to orange, common light gray, 100% clear and frosted quartz, occasional orange to green chert, predominantly unconsolidated Uf to Vc, moderately to well sorted, a to r, poor to fair intergranular porosity, no show.

165-170 SANDSTONE: red to orange to light gray, 100% clear and frosted quartz, predominantly unconsolidated Lm to Uc, moderately to well sorted, predominant argillaceous cement, poor to fair intergranular porosity, no show.

170-175 SANDSTONE: red to orange, 100% clear and frosted quartz, predominantly unconsolidated, upper medium to upper very coarse, trace lower fine to lower medium, moderately to well sorted, predominant argillaceous cement, poor to fair intergranular porosity, no show.

175-180 SANDSTONE: red to orange, 100% clear and frosted quartz, occasional red to orange chert, predominantly unconsolidated, upper fine to upper medium, occasional very fine to lower fine, well sorted, sub angular to sub rounded, occasional angular, predominant red argillaceous cement, poor to fair intergranular porosity, no show.

180-186.5 SANDSTONE: red to orange, 100% clear and frosted quartz, occasional red to orange chert, predominantly unconsolidated, upper fine to upper medium, common very fine to lower fine, moderately to well sorted, sub angular to sub rounded, occasional angular, predominant red argillaceous cement, poor to fair intergranular porosity, no show.



APPENDIX G: STRATIGRAPHIC COLUMN



Scale 1:240 (5"=100') Metric
Measured Depth Log

Well Name: VULCAN MINERALS RED BROOK # 1 2006-03-107

Location: RED BROOK #1 03-107

Licence Number: 03-107

Region: ROBINSONS, NL

Spud Date: 11/24/2006

Drilling Completed: Susp. 12/20/2006

Surface Coordinates: Northing: 534384.854

Easting: 370116.036.036

Bottom Hole Coordinates: As above, vertical Hole

Ground Elevation (m): 56.44m

K.B. Elevation (m): 59.77m

Logged Interval (m): 80 To: 184

Total Depth (m): 18.5

Formation: Devonian

Type of Drilling Fluid: Gel

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Vulcan Minerals Inc.

Address: 333 Duckworth Street
St. John's NL A1C 1G9

GEOLOGIST

Name: Jeffrey Hearn B.Sc

Company: East Rock Geoconsulting

Address: 1816 Crowchild Tr. N.W.
Calgary, AB T2M 3Y7

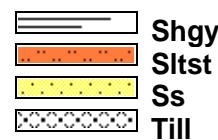
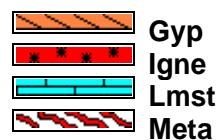
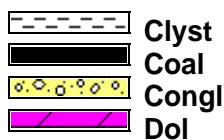
Tel: (403) 313-5902

Comments

Conductor Pipe Set at 86m KB (244.5mm)

Surface Casing Set at 186.5m KB (177.8mm)

ROCK TYPES

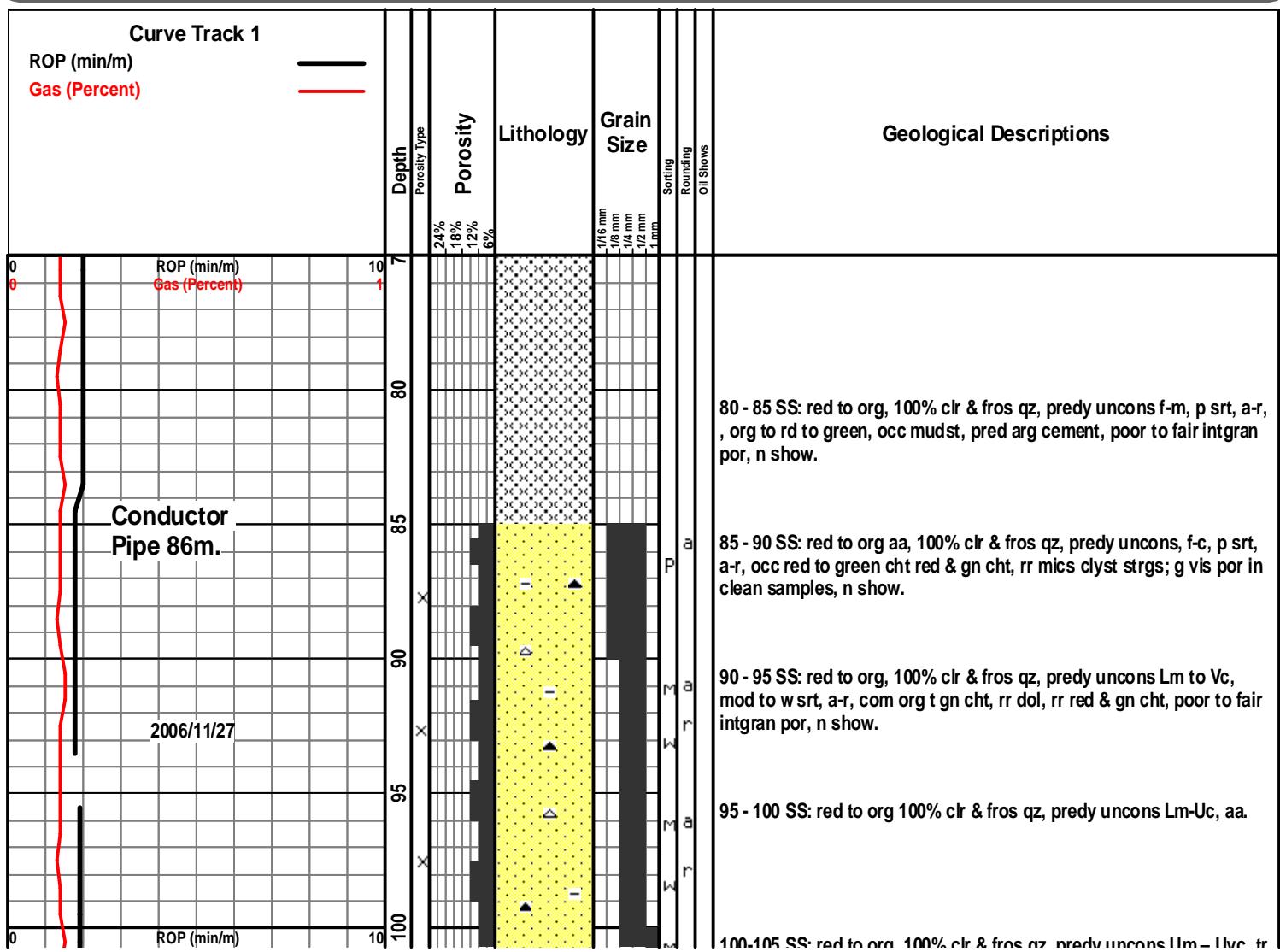


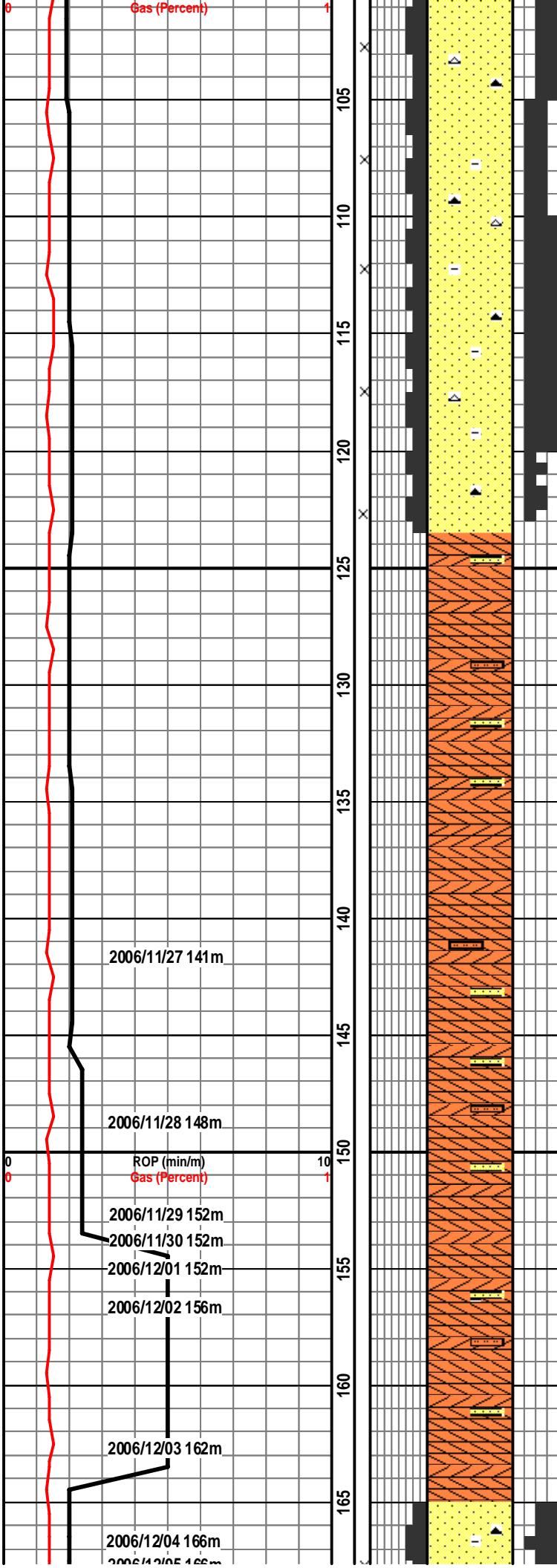
ACCESSORIES

MINERAL	Gyp	FOSSIL	Ostra	Slstrg
Anhy	Hvymin	Algae	Pelec	Ssstrg
Arggrn	Kaol	Amph	Pellet	
Arg	Marl	Belm	Pisolite	
Bent	Minxl	Bioclst	Plant	TEXTURE
Bit	Nodule	Brach	Strom	BS Boundst
Brecfrag	Phos	Bryozoa		C Chalky
Calc	Pyr	Cephal		CX CryxIn
Carb	Salt	Coral		E Earthy
Chtdk	Sandy	Crin		FX FinexIn
Chtlt	Silt	Echin		GS Grainst
Dol	Sil	Fish		L Lithogr
Feldspar	Sulphur	Foram		MX MicroxIn
Ferrpel	Tuff	Fossil		MS Mudst
Ferr		Gastro		PS Packst
Glau		Oolite		WS Wackest

OTHER SYMBOLS

POROSITY		<input checked="" type="checkbox"/> Vuggy	ROUNDING		<input checked="" type="checkbox"/> Spotted	EVENT	
<input checked="" type="checkbox"/> E	Earthy		<input checked="" type="checkbox"/> R	Rounded	<input checked="" type="checkbox"/> Ques	<input checked="" type="checkbox"/> Rft	
<input checked="" type="checkbox"/> F	Fenest	SORTING	<input checked="" type="checkbox"/> r	Subrnd	<input checked="" type="checkbox"/> D	Dead	<input checked="" type="checkbox"/> Sidewall
<input checked="" type="checkbox"/> F	Fracture	<input checked="" type="checkbox"/> W	Well	<input checked="" type="checkbox"/> a	Subang		
<input checked="" type="checkbox"/> X	Inter	<input checked="" type="checkbox"/> M	Moderate	<input checked="" type="checkbox"/> A	Angular	INTERVAL	
<input checked="" type="checkbox"/> A	Moldic	<input checked="" type="checkbox"/> P	Poor			<input checked="" type="checkbox"/> Core	
<input checked="" type="checkbox"/> O	Organic		OIL SHOW	<input checked="" type="checkbox"/> D	Dst		
<input checked="" type="checkbox"/> P	Pinpoint		<input checked="" type="checkbox"/> Even				





100-105 SS: red to org, 100% clr & fros qz, predy uncons Uf - Uvc, If - Im, mod to w srt, poor to fair intgran por, n show.

105-110 SS: red to org, 100% clr & fros qz, occ red to org cht, predy uncons, Uf - Um, occ Vf Lf, w srt, a - r, occ A, pred red arg cmt, poor to fair intgran por, n show.

110-115 SS: red to org, 100% clr & fros qz, occ org to grn cht, predy uncons, Uf to Uc, mod to w srt, a-r, pred arg cmt, occ calc poor to fair intgran por, n show.

110-115 SS: red to org, 100% clr & fros qz, occ org to grn cht, predy uncons, Uf to Uc, mod to w srt, a-r, aa.

120-125 GYP/ ANHY: 95% predy selenite, occ alabaster, clr - transp, occ v It gy & mas; SLTST - VF SS: aa.

125-130 GYP/ ANHY: 100% predy selenite, occ alabaster, anhy predy clr - transp v It gy & mas.

130-135 GYP: 100% selenite to alabaster.

135-140 GYP: 90% predy selenite, rr alabaster; ANHY: 10% anhy predy v It gy, mas.

140-145 GYP: 90% selenite, rr alabaster; ANHY: 10% anhy predy v It gy, mas, tr - mnr halite.

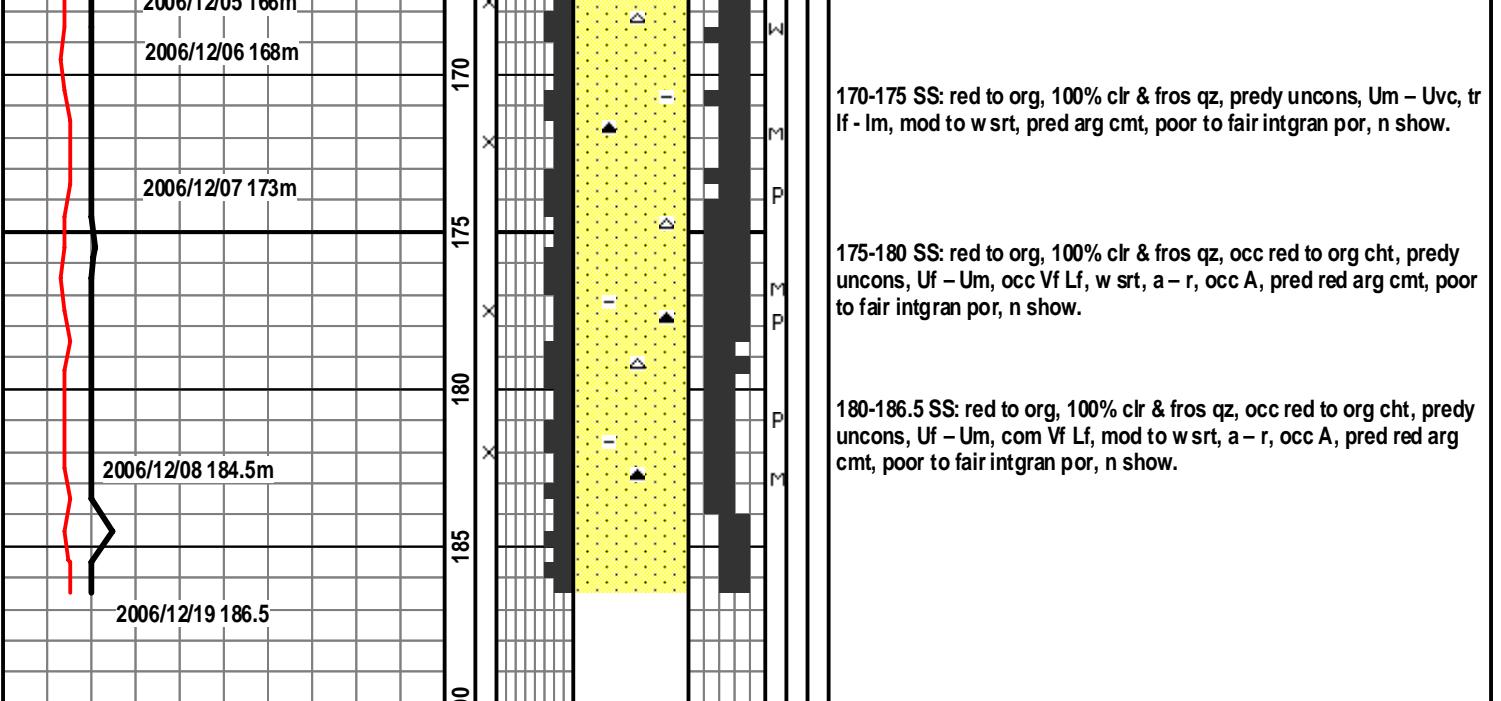
145-150 GYP: 100% selenite, rr alabaster (urbanite discluded though majority of sample)

150-155 GYP: 90% selenite, rr alabaster; ANHY: 10% anhy predy v It gy, mas.

155-160 GYP: 90% selenite, rr alabaster; ANHY: 10% anhy predy v It gy, mas, tr - mnr halite.

160-165 SS: red to org, common It gy, 100% clr & fros qz, occ org to grn cht, predy uncons Uf to Vc, mod to w srt, a-r, poor to fair intgran por, n show.

165-170 SS: red to org to It gy, 100% clr & fros qz, predy uncons Lm-Uc, mod to w srt, pred arg cmt, poor to fair intgran por, n show.





APPENDIX H: EMPLOYEE BENEFITS SUMMARY

Red Brook #1: Benefits Summary

Week	Residence		Total
	NL	Other	
1	15	1	16
2	12	1	13
3	9	1	10
4	14	1	15

Average number of workers on site each week	13.5
Percentage of workers residents of NL	92.6%
Percentage of workers non-residents of NL	7.4%

Week	1: October 26 to November 1					2: November 2 to November 8				
Position	NL Residents	# of Days Worked	Non- NL Residents	# of Days Worked	Total	NL Residents	# of Days Worked	Non- NL Residents	# of Days Worked	Total
Project Manager / Engineer	1	7			1	1	7			1
Supervisors	1	5			1	1	7			1
Rig Mangers	1	4			1					0
Drillers	2	7			2	2	7			2
Floorhands	4	7			4	4	7			4
Geologists			1	4	1			1	4	1
Mud Loggers					0					0
MWD/Directional					0					0
Wireline Logging					0					0
Cementing	1	2			1					0
Testing					0					0
Administration					0					0
Security	1	7			1	1	7			1
Heavy Equipment Operators	2	7			2	2	2			2
Welders & Helpers	1	2			1					0
Fuel Hauler	1	2			1	1	2			1
Winterization					0					0
Waste Disposal					0					0
Total	15		1		16	12		1		13

Week	3: November 9 to 15					4: November 16 to 18				
Position	NL Residents	# of Days Worked	Non- NL Residents	# of Days Worked	Total	NL Residents	# of Days Worked	Non- NL Residents	# of Days Worked	Total
Project Manager / Engineer	1	7			1	1	3			1
Supervisors	1	7			1	1	3			1
Rig Mangers					0					0
Drillers	2	7			2	2	3			2
Floorhands	4	7			4	4	3			4
Geologists			1	7	1			1	3	1
Mud Loggers					0					0
MWD/Directional					0					0
Wireline Logging					0					0
Cementing					0	1	2			1
Testing					0					0
Administration					0					0
Security					0	1	1			1
Heavy Equipment Operators					0	2	2			2
Welders & Helpers					0	1	1			1
Fuel Hauler	1	2			1					0
Winterization					0					0
Waste Disposal					0	1	2			1
Total	9		1		10	14		1		15



APPENDIX I: DAILY OPERATIONAL REPORTS

Vulcan Minerals

DAILY DRILLING REPORT

Summary of Rig Up

Nov 20: Start mobilizing drilling rig and equipment. C

Summary of Rig Up Operations:
Nov 20: Start mobilizing drilling rig and equipment. Complete mast inspection prior to raising the mast. Nov 24: Drilled 216mm pilot hole with

Nov 20: Start mobilizing drilling rig and equipment. Complete mast inspection prior to raising the mast. Nov 24: Drilled 2.61mm pilot hole with tricone from surface to TD at 107m . Nov 24: Open hole to 311mm with tricone. Nov 26: Ran 17 Jts J-55 244.5 mm casing to 86.5 m. Unable to run casing beyond 86.5m . Cemented with 5 m3 class A cement 100% excess. 1 m3 good cement returns. Annulas held

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1		REPORT #:	2	DATE:	November 29, 2006
DEPTH 24:00:	148.0 m	PROGRESS:	31.0 m	Last 24 Hr Rotating Time:	17.50 hr
OPER 09:00:	Lost Circ. Mix LCM			FOREMAN:	Bill Williams
DAILY COST:		HOLE CND.:	Losses	WEATHER:	Clear
CUM COST:		RIG / RIG #:	Ingersoll Rand RD10	TEMP.:	-3°C
FORMATION:		K.B. ELEV.:	3.3 m	ROADS:	Good
				TOOLPUSH:	
				T.P. MOBILE:	

BOTTOMHOLE ASSEMBLY

No.	Item	Max OD	Min ID	Connection Size & Type
1	Bit	8.5-in		3-1/2" Reg
2	Stabilizer	8-in		2-7/8" IF
3	Drill Collars	4.75-in		3-1/2" IF
BHA Length:	10.17	Hook Load:	DP size	4.5"
Avail WOB:		Jts DP Racks	DC Conn:	3-1/2" IF
Jts DP in hole:	18	DP on Loc:	DP Conn:	2-7/8" IF

BILLING OPERATIONS TIME BREAKDOWN

24 HOUR SUMMARY FOR THE DATE :

November 28, 2006 (0000 hrs - 2400 hrs)

24 HOUR Forecast :

Mix LCM Pills attempt to stop losses and Drill ahead.

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1					REPORT #:	3	DATE:	November 30, 2006	
DEPTH 24:00:	152.0 m	PROGRESS:	4.0 m	Last 24 Hr Rotating Time:	2.50 hr	Ave ROP:	1.8 m/hr		
OPER 09:00:	Drilling			FOREMAN:	Greg Walsh	MOBILE NO.:	709-689-9673		
DAILY COST:		HOLE CND.:	Good	WEATHER:	Clear	TOOLPUSH:	Bill Williams		
CUM COST:		RIG / RIG #:	Ingersoll Rand RD10	TEMP.:	-3°C	T.P. MOBILE:			
FORMATION:		K.B. ELEV.:	3.3 m	ROADS:	Good				
BIT PERFORMANCE			SURVEYS		DRILLING FLUID		PUMPS		
Bit No.	1			141m	1.00 °	Time	2400	Pump No.	1
Size (mm)	216					Depth(m)		Make	Gardner Denver
Mfg.	Security					Density		Model	PY-7
Type	J-22					Mud Grad		Liner X Stk	6"
Serial #	11584					Vis		SPM	40
Nozzles						PV		Pump Eff.	95%
From (mKB)	107					YP		Pump Rate	0.39
To (mKB)	152					Gels		Pump Press.	350 kPa
Hrs on Bit	23					pH		Drillpipe AV	m/min
WOB (daN)						WL (cc's)		Drillcollar AV	m/min
RPM	90					Filter Cake		Nozzle Vel	m/sec
Condition						Sand (%)			
Pulled For?						Solids (%)			
Meters	45					Oil (%)			
m/hr	1.96					Pr/Mf			
						Ca (ppm)			
BOTTOMHOLE ASSEMBLY									
No.	Item	Max OD	Min ID	Connection Size & Type					
1	Bit	8.5-in		3-1/2" Reg					
2	Stabilizer	8-in		2-7/8" IF					
3	Drill Collars	4.75-in		3-1/2" IF					
BHA Length:	10.17	Hook Load:		DP size	4.5"				
Avail WOB:		Jts DP Racks		DC Conn:	3-1/2" IF				
Jts DP in hole:		DP on Loc:		DP Conn:	2-7/8" IF				
DRILLING OPERATIONS TIME BREAKDOWN									
RU / TO		Survey		Move Rig					
Drill w/ fluid	2 1/2	Logging		Fishing					
Drill w/ air		Run Casing							
Reaming		Cementing							
Rm Rathole		WOC		Safety Meeting					
Cond / Circ	19 1/2	NU BOP's		Mix mud					
Tripping		Test BOPs		W.O GEN					
Lubricate Rig		Drill Out Cmt							
Repair Rig		DST							
		Hndl Tools		Total Hrs	24				
24 HOUR SUMMARY FOR THE DATE : November 29, 2006 (0000 hrs - 2400 hrs)									
From	To	Duration	Event						
0:00	7:00	7.00	Mix and Spot LCM Pills						
7:00	7:30	0.50	Drill 216mm Hole F/148 to 149m						
7:30	10:00	2.50	Mix and Spot LCM Pills						
10:00	10:30	0.50	Drill 216mm Hole F/149 to 150m						
10:30	12:30	2.00	Mix and Spot LCM Pills Clean mud pump fluid end.						
12:30	14:00	1.50	Drill 216mm hole F/150 to 152m.						
14:00	22:00	8.00	Mix and Spot LCM pills. Wiper trip Spot pill.						
22:00	0:00	2.00	Pooh F/ 152m to surface for LCM (gel bags)						
24 HOUR Forecast :									
While drilling LCM @148m Drill Pipe twisted off @ 37.23m. Presently monitoring well bore for static losses while waiting on weatherford tools.									

Vulcan Minerals

DAILY DRILLING REPORT

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook #1		REPORT #:	5	DATE:	December 2, 2006
DEPTH 24:00:	152.0 m	PROGRESS:	Last 24 Hr Rotating Time:		Ave ROP:
OPER 09:00:	Drilling	FOREMAN:		MOBILE NO.:	709-689-4106
DAILY COST:	HOLE CND.:	Good	WEATHER:	Rain	TOOLPUSH: Greg Walsh
CUM COST:	RIG / RIG #:	Ingersoll Rand RD10	TEMP.:	3°C	T.P. MOBILE:
FORMATION:	K.B. ELEV.:	3.3 m	ROADS:	Good	

BIT PERFORMANCE				SURVEYS		DRILLING FLUID		PUMPS		
Bit No.	1			141 m	1.00 °	Time	2400	Pump No.	1	
Size (mm)	216					Depth(m)		Make	Gardner Denver	
Mfg.	Security					Density	1050	Model	PY-7	
Type	J-22					Mud Grad		Liner X Stk	6"	
Serial #	11584					Vis	65	SPM	40	
Nozzles						PV		Pump Eff.	95%	
From (mKB)	107					YP		Pump Rate	0.39	
To (mKB)	152					Gels		Pump Press.	350	kPa
Hrs on Bit	23					pH		Drillpipe AV		m/min
WOB (daN)						WL (cc's)		Drillcollar AV		m/min
RPM	90					Filter Cake		Nozzle Vel		m/sec
Condition						Sand (%)				
Pulled For?						Solids (%)				
Meters	45					Oil (%)				
m/hr	1.96					Pf/Mf				
Cum Hrs						MBT				
						Cl (ppm)				
MUD & CHEMICALS										
								Mud Cycle	92	min
								Bottoms Up	14	min
								Tanks	30	m3
								Hole Volume	6	m3

BOTTOMHOLE ASSEMBLY					Ca (ppm) Mud Co. Mud Man Mud Up @	System Vol. 36 m3 Mud & Chemicals Added: 6sxs of federal supreme
No.	Item	Max OD	Min ID	Connection Size & Type		
1	Bit	8.5-in		3-1/2" Reg		
2	Stabilizer	8-in		2-7/8" IF		
3	Drill Collars	4.75-in		3-1/2" IF		
BHA Length:		10.17	Hook Load:		DP size	4.5"
Avail WOB:		Jts DP Racks		DC Conn:	3-1/2" IF	
Jts DP in hole:		DP on Loc:		DP Conn:	2-7/8" IF	
					VOLUMES	M ³

DRILLING OPERATIONS TIME BREAKDOWN						Water added		Mud Daily Cost	
						Losses		Mud Cum Cost	
						WELL CONTROL		SOLIDS CONTROL	
RU / TO		Survey		Move Rig		1/2			
Drill w/ fluid		Logging		Fishing			RSPP		FSI
Drill w/ air		Run Casing					ST/Min		180
Reaming		Cementing					Shaker Mesh		
Rm Rathole		WOC		Safety Meeting			MACP(kPa)		
Cond / Circ		NU BOP's		Mix mud			Calc Hole Fill		
Tripping	1 1/2	Test BOPs		W.O GEN		20 1/2	Act Hole Fill		
Lubricate Rig		Drill Out Cmt		Wait on Materials			Lst BOP Drill:		
Repair Rig		DST					Calc Hole Fill		
M/U BHA	1 1/2	Hndle Tools		Total Hrs		24	Hours/Days		
							Act Hole Fill		
							Boiler Hrs:		(to 24:00)

24 HOUR Forecast :
POOH inspect string & BHA. RIH to shoe. Mix & condition mud with LCM. Clean to bottom & Drill ahead while monitoring for losses.

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1				REPORT #:	6	DATE:	December 3, 2006		
DEPTH 24:00:	156.0 m	PROGRESS:	4.0 m	Last 24 Hr Rotating Time:	0.50 hr	Ave ROP:			
OPER 09:00:	Drilling			FOREMAN:		MOBILE NO.:	709-689-4106		
DAILY COST:		HOLE CND.:	Good	WEATHER:	Snow	TOOLPUSH:	Greg Walsh		
CUM COST:		RIG / RIG #:	Ingersoll Rand RD10	TEMP.:	-3°C	T.P. MOBILE:			
FORMATION:		K.B. ELEV.:	3.3 m	ROADS:	Good				
BIT PERFORMANCE				SURVEYS		DRILLING FLUID			
Bit No.	1	2		141m	1.00 °	Time	2400	Pump No.	1
Size (mm)	216	216				Depth(m)		Make	Gardner Denver
Mfg.	Security	REED				Density		Model	PY-7
Type	J-22	38 E				Mud Grad		Liner X Stk	6"
Serial #	11584	136604				Vis	60	SPM	40
Nozzles						PV		Pump Eff.	95%
From (mKB)	107	152				YP		Pump Rate	0.39
To (mKB)	152	156				Gels		Pump Press.	350 kPa
Hrs on Bit	23	1/2				pH		Drillpipe AV	m/min
WOB (daN)						WL (cc's)		Drillcollar AV	m/min
RPM	90	90				Filter Cake		Nozzle Vel	m/sec
Condition	seals failed					Sand (%)			
Pulled For?	TW					Solids (%)			
Meters	45	4				Oil (%)			
m/hr	1.96	8.00				Pr/Mf			
BOTTOMHOLE ASSEMBLY						Ca (ppm)			
No.	Item	Max OD	Min ID	Connection Size & Type					
1	Bit	8.5-in		3-1/2" Reg					
2	Stabilizer	8-in		2-7/8" IF					
3	Drill Collars	4.75-in		3-1/2" IF					
BHA Length:	10.17	Hook Load:		DP size	4.5"				
Avail WOB:		Jts DP Racks		DC Conn:	3-1/2" IF				
Jts DP in hole:		DP on Loc:		DP Conn:	2-7/8" IF				
DRILLING OPERATIONS TIME BREAKDOWN									
RU / TO		Survey		Move Rig					
Drill w/ fluid	1/2	Logging		Fishing		1			
Drill w/ air		Run Casing							
Reaming	2	Cementing							
Rm Rathole		WOC							
Cond / Circ	15	NU BOP's							
Tripping	3 1/2	Test BOPs							
Lubricate Rig		Drill Out Cmt							
Repair Rig		DST							
Fishing		Hndl Tools		Total Hrs	24				
24 HOUR SUMMARY FOR THE DATE :				December 2, 2006 (0000 hrs - 2400 hrs)					
From	To	Duration		Event					
0:00	1:00	1.00	Lay down fishing tools.						
1:00	2:30	1.50	POOH with BHA.						
2:30	5:00	2.50	Nipple Down Diverter change bit Nipple up Diverter						
5:00	6:00	1.00	RIH to Casing Shoe						
6:00	13:00	7.00	Circulate and Mix new LCM mud						
13:00	15:00	2.00	Wash from shoe to 149m monitoring returns & checking salinity of mud.						
15:00	23:00	8.00	Lost Circ. @149m. Mix LCM & pumps sweeps. POOH to shoe. Clean pump. Functioned diverter.						
23:00	23:30	0.50	RIH to 152m						
23:30	0:00	0.50	Drill 216mm hole f/152 to 156m.						
24 HOUR Forecast :									
Drill 216mm hole while mixing LCM.									

Vulcan Minerals

DAILY DRILLING REPORT

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1					REPORT #:	8	DATE:	December 5, 2006
DEPTH 24:00:	166.0 m	PROGRESS:	6.0 m		Last 24 Hr Rotating Time:	1.25 hr	Ave ROP:	3.5 m/hr
OPER 09:00:	Drilling				FOREMAN:		MOBILE NO.:	709-689-4106
DAILY COST:		HOLE CND.:	Good		WEATHER:	Snow	TOOLPUSH:	Greg Walsh
CUM COST:		RIG / RIG #:	Ingersoll Rand RD10		TEMP.:	-3°C	T.P. MOBILE:	
FORMATION:		K.B. ELEV.:	3.3 m		ROADS:	Good		
BIT PERFORMANCE			SURVEYS		DRILLING FLUID	PUMPS		
Bit No.	2		141 m	1.00 °	Time	2400	Pump No.	1
Size (mm)	216				Depth(m)	1050	Make	Gardner Denver
Mfg.	REED				Density	65	Model	PY-7
Type	38 E				Mud Grad	10	Liner X Stk	6"
Serial #	136604				Vis		SPM	40
Nozzles					PV		Pump Eff.	95%
From (mKB)	152				YP		Pump Rate	0.39
To (mKB)	166				Gels		Pump Press.	350 kPa
Hrs on Bit	5				pH		Drillpipe AV	m/min
WOB (daN)					WL (cc's)		Drillcollar AV	m/min
RPM	90				Filter Cake		Nozzle Vel	m/sec
Condition	good				Sand (%)			
Pulled For?	Cement Plug				Solids (%)			
Meters	14				Oil (%)			
m/hr	2.80				Pf/Mf			
Cum Hrs					MBT			
BOTTOMHOLE ASSEMBLY					Cl (ppm)			
No.	Item	Max OD	Min ID	Connection Size & Type	Ca (ppm)			
1	Bit	8.5-in		3-1/2" Reg				
2	Stabilizer	8-in		2-7/8" IF				
3	Drill Collars	4.75-in		3-1/2" IF				
BHA Length:	10.17	Hook Load:		DP size	1			
Avail WOB:		Jts DP Racks		4.5"	8			
Jts DP in hole:		DP on Loc:		3-1/2" IF				
DP Conn:		DP Conn:		2-7/8" IF				
DRILLING OPERATIONS TIME BREAKDOWN					VOLUMES M³			
RU / TO		Survey		Move Rig	Water added			
Drill w/ fluid	1 1/4	Logging		Fishing	Losses			
Drill w/ air		Run Casing		WO cement				
Reaming		Cementing	5 1/2					
Rm Rathole		WOC		Safety Meeting				
Cond / Circ	2 3/4	NU BOP's		Mix mud				
Tripping	5 1/2	Test BOPs		W.O GEN				
Lubricate Rig		Drill Out Cmt						
Repair Rig		DST						
Fishing		Hndle Tools		Total Hrs	24			
24 HOUR SUMMARY FOR THE DATE :					December 4, 2006 (0000 hrs - 2400 hrs)			
From	To	Duration	Event					
0:00	2:15	2.25	Drill 216mm hole from 162m to 166m.					
2:15	5:30	3.25	POOH & lay down BHA.					
5:30	6:15	0.75	RIH open ended to casing shoe.					
6:15	9:30	3.25	Prepair for cement plug.					
9:30	14:00	4.50	Clean mud pump , build volume & prepare for cement plug.					
14:00	14:45	0.75	Hold tool box talk.Pump water spacer. Pump 5m3 of 14.5 ppg cement .Displace with water .					
14:45	15:15	0.50	POOH to 60m.					
15:15	16:00	0.75	Circ no cement to surface					
16:00	18:00	2.00	Remove suctions from cement pump & clean same.					
18:00	0:00	6.00	Wait on cement. Remove diverter & M/U BHA.Install diverter. Condition mud.					
24 HOUR Forecast :								
Wait on cement. RIH confirm top of cement and drill out cement.								

Vulcan Minerals

DAILY DRILLING REPORT

Vulcan Minerals

DAILY DRILLING REPORT

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook #1		REPORT #:	11	DATE:	December 8, 2006
DEPTH 24:00:	175.0 m	PROGRESS:	7.0 m	Last 24 Hr Rotating Time:	4.50 hr
OPER 09:00: Condition Mud		FOREMAN:		MOBILE NO.:	
DAILY COST:	HOLE CND.:	Good	WEATHER:	Rain	TOOLPUSH: Greg Walsh
CUM COST:	RIG / RIG #:	Ingersoll Rand RD10	TEMP.:	3°C	T.P. MOBILE:
FORMATION:	K.B. ELEV.:	3.3 m	ROADS:	Good	

BIT PERFORMANCE				SURVEYS		DRILLING FLUID		PUMPS					
Bit No.	2RR	2RR2		141 m	1.00 °	Time	2400	Pump No.	1				
Size (mm)	216	216				Depth(m)		Make	Gardner Denver				
Mfg.	REED	REED				Density	1040	Model	PY-7				
Type	38 E	38 E				Mud Grad		Liner X Stk	6"				
Serial #	136604	136604				Vis	60	SPM	40				
Nozzles						PV		Pump Eff.	95%				
From (mKB)	166	170				YP		Pump Rate	0.39				
To (mKB)	170	175				Gels	10	Pump Press.	350 kPa				
Hrs on Bit	3 1/4	3 1/4				pH		Drillpipe AV	m/min				
WOB (daN)						WL (cc's)		Drillcollar AV	m/min				
RPM	90	90				Filter Cake		Nozzle Vel	m/sec				
Condition	good					Sand (%)							
Pulled For?	Cement Plug					Solids (%)							
Meters	4	5				Oil (%)							
m/hr	1.23	1.54				Pt/Mt							
Cum Hrs	8 1/4	11 1/2				MBT							
Cum m/hr	2.18	2.00				Cl (ppm)							
BOTTOMHOLE ASSEMBLY													
No.	Item	Max OD	Min ID	Connection Size & Type									
1	Bit	8.5-in		3-1/2" Reg									
2	Stabilizer	8-in		2-7/8" IF									
3	Drill Collars	4.75-in		3-1/2" IF									
BHA Length:		10.17	Hook Load:		DP size	4.5"		Mud & Chemicals Added: Mud Co. Mud Man Mud Up @					
Avail WOB:			Jts DP Racks		DC Conn:	3-1/2" IF							
Jts DP in hole:			DP on Loc:		DP Conn:	2-7/8" IF							
DRILLING OPERATIONS TIME BREAKDOWN													
RU / TO		Survey		Move Rig		VOLUMES M ³		Mud Daily Cost Mud Cum Cost					
Drill w/ fluid	4 1/2	Logging		Fishing									
Drill w/ air		Run Casing		WO cement									
Reaming		Cementing	1	Drill cement									
Rm Rathole		WOC		Safety Meeting				WELL CONTROL					
Cond / Circ	1 1/2	NU BOP's		Mix mud				Shaker Make	FSI 180				
Tripping		Test BOPs		W.O GEN				Shaker Mesh					
Lubricate Rig	3 1/2	Drill Out Cmt						MACP(kPa)					
Rig Service		DST	3/4					Calc Hole Fill					
Fishing		Hndle Tools		Total Hrs				Act Hole Fill					
				24				Vol UF (l/min)					
								Act Hole Fill					
								U.F. (kg/m ³)					
								Lst BOP Drill:					
								O.F. (kg/m ³)					
								Calc Hole Fill					
								Hours/Days					
								Act Hole Fill					
								Desilter					
								Centrifuge					
								Boiler Hrs:	(to 24:00)				

24 HOUR Forecast :

Build volume and condition mud @ shoe. RIH to 184m and drill ahead.

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1		REPORT #:	12	DATE:	December 9, 2006
DEPTH 24:00:	184.5 m	PROGRESS:	9.5 m	Last 24 Hr Rotating Time:	5.50 hr
OPER 09:00:	Wait on Cement			FOREMAN:	MOBILE NO.:
DAILY COST:		HOLE CND.:	Good	WEATHER:	Rain
CUM COST:		RIG / RIG #:	Ingersoll Rand RD10	TEMP.:	3°C
FORMATION:		K.B. ELEV.:	3.3 m	ROADS:	Good

24 HOUR SUMMARY FOR THE DATE :			December 8, 2006 (0000 hrs - 2400 hrs)
From	To	Duration	Event
0:00	3:30	3.50	Drill 216mm hole from 175m to 182m.
3:30	4:15	0.75	Mix and condition mud.
4:15	5:45	1.50	Drill 216mm hole from 182 to 184m.
5:45	6:30	0.75	POOH to casing shoe.
6:30	10:30	4.00	Mix and condition mud.
10:30	11:00	0.50	Drill 216mm hole from 184m to 184.5 m.
11:00	12:00	1.00	Spot LCM pill on bottom
12:00	16:00	4.00	POOH lay down BHA.
16:00	18:00	2.00	RIH with cement stinger to 175m. Pull back to shoe.
18:00	21:00	3.00	Clean mud pump and prepare for cement plug.
21:00	21:30	0.50	RIH to 169m.
21:30	22:45	1.25	Hold TBT pump water spacer, 4 m3 14.4ppg cement and displace with 0.7m3 water.
22:45	0:00	1.25	POOH with cement stinger.

24 HOUR Forecast :

Wait on cement and condition mud. Mix and build high vis volume. RIH drill out cement.

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook #1					REPORT #: 13	DATE: December 10, 2006		
DEPTH 24:00: 184.5 m		PROGRESS:			Last 24 Hr Rotating Time:			
OPER 09:00: Drilling					FOREMAN: Ave ROP:			
DAILY COST:		HOLE CND.: Good			WEATHER: Rain			
CUM COST:		RIG / RIG #: Ingersoll Rand RD10			TEMP.: 3°C			
FORMATION:		K.B. ELEV.: 3.3 m			ROADS: Good			
BIT PERFORMANCE			SURVEYS		DRILLING FLUID		PUMPS	
Bit No.	2RR3			141 m	1.00 °	Time	2400	Pump No. 1
Size (mm)	216					Depth(m)	1080	Make Gardner Denver
Mfg.	REED					Density		Model PY-7
Type	38 E					Mud Grad		Liner X Stk 6"
Serial #	136604					Vis	60	SPM 40
Nozzles						PV		Pump Eff. 95%
From (mKB)	184.5					YP		Pump Rate 0.39
To (mKB)	184.5					Gels		Pump Press. 350 kPa
Hrs on Bit						pH		Drillpipe AV m/min
WOB (daN)						WL (cc's)		Drillcollar AV m/min
RPM						Filter Cake		Nozzle Vel m/sec
Condition						Sand (%)		
Pulled For?						Solids (%)		
Meters						Oil (%)		
m/hr						Pf/Mf		
Cum Hrs	17					MBT		
Cum m/hr	1.91					Cl (ppm)		
BOTTOMHOLE ASSEMBLY						Ca (ppm)		
No.	Item	Max OD	Min ID	Connection Size & Type				
1	Bit	8.5-in		3-1/2" Reg				
2	Stabilizer	8-in		2-7/8" IF				
3	Drill Collars	4.75-in		3-1/2" IF				
BHA Length: 10.17		Hook Load:		DP size	4.5"			
Avail WOB:		Jts DP Racks		DC Conn:	3-1/2" IF			
Jts DP in hole:		DP on Loc:		DP Conn:	2-7/8" IF			
DRILLING OPERATIONS TIME BREAKDOWN						VOLUMES M ³	MUD & CHEMICALS	
RU / TO		Survey		Move Rig		Water added		Mud & Chemicals Added:
Drill w/ fluid	2	Logging		Fishing		Losses		6sxs of federal supreme
Drill w/ air		Run Casing		WO cement				
Reaming		Cementing		Drill cement				
Rm Rathole		WOC		Safety Meeting				
Cond / Circ	1 1/4	NU BOP's		Mix mud				
Tripping	4 3/4	Test BOPs		W.O GEN				
Lubricate Rig		Drill Out Cmt						
Repair Rig		DST						
Fishing		Hndl Tools		Total Hrs	24			
24 HOUR SUMMARY FOR THE DATE : December 9, 2006 (0000 hrs - 2400 hrs)						WELL CONTROL		
From	To	Duration	Event			SOLIDS CONTROL		
0:00	1:00	1.00	Clean mud pump and equipment after cement plug #4.			Shaker Make	FSI	
1:00	3:00	2.00	Pick up BHA & RIH to shoe.			Shaker Mesh	180	
3:00	18:00	15.00	Wait on cement. Mix and Condition mud.					
18:00	19:00	1.00	RIH to 105m. Ream from 105m to 112m.			Vol UF (l/min)		
19:00	20:00	1.00	Continue to RIH. Wash to top of cement @ 159m.			U.F. (kg/m ³)		
20:00	22:00	2.00	Drill cement from 159m to 184.5m. Encountered losses.			O.F. (kg/m ³)		
22:00	22:45	0.75	POOH to casing shoe.			Hours/Days		
22:45	0:00	1.25	Build volume and mix high vis mud.			Act Hole Fill		
						Boiler Hrs:	(to 24:00)	
24 HOUR Forecast :								
Build volume and condition hole.								

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook #1					REPORT #:	14	DATE:	December 11, 2006		
DEPTH 24:00:	186.5 m		PROGRESS:	2.0 m	Last 24 Hr Rotating Time:	0.75 hr	Ave ROP:	2.7 m/hr		
OPER 09:00:	Circulating				FOREMAN:		MOBILE NO.:	709-689-4106		
DAILY COST:			HOLE CND.:	Good	WEATHER:	Rain	TOOLPUSH:	Greg Walsh		
CUM COST:			RIG / RIG #:	Ingersoll Rand RD10	TEMP.:	3°C	T.P. MOBILE:			
FORMATION:			K.B. ELEV.:	3.3 m	ROADS:	Good				
BIT PERFORMANCE					SURVEYS		DRILLING FLUID			
Bit No.	2RR3				141 m	1.00 °	Time	2400	PUMPS	
Size (mm)	216						Depth(m)	1080	Pump No.	1
Mfg.	REED						Density		Make	Gardner Denver
Type	38 E						Mud Grad		Model	PY-7
Serial #	136604						Vis	70	Liner X Stk	6"
Nozzles							PV		SPM	40
From (mKB)	184.5						YP		Pump Eff.	95%
To (mKB)	186.5						Gels		Pump Rate	0.39
Hrs on Bit	3/4						pH		Pump Press.	350 kPa
WOB (daN)							WL (cc's)		Drillpipe AV	m/min
RPM	90						Filter Cake		Drillcollar AV	m/min
Condition							Sand (%)		Nozzle Vel	m/sec
Pulled For?							Solids (%)			
Meters	2						Oil (%)			
m/hr	2.67						Pf/Mf			
Cum Hrs	17 3/4						MBT			
Cum m/hr	1.94						Cl (ppm)			
BOTTOMHOLE ASSEMBLY									MUD & CHEMICALS	
No.	Item	Max OD	Min ID	Connection Size & Type			Ca (ppm)		Mud Cycle	95 min
1	Bit	8.5-in		3-1/2" Reg					Bottoms Up	18 min
2	Stabilizer	8-in		2-7/8" IF					Tanks	30 m3
3	Drill Collars	4.75-in		3-1/2" IF					Hole Volume	7 m3
BHA Length:	10.17	Hook Load:		DP size	4.5"				System Vol.	37 m3
Avail WOB:		Jts DP Racks		DC Conn:	3-1/2" IF					
Jts DP in hole:		DP on Loc:		DP Conn:	2-7/8" IF					
DRILLING OPERATIONS TIME BREAKDOWN									MUD & CHEMICALS	
RU / TO		Survey		Move Rig					Mud & Chemicals Added:	
Drill w/ fluid	3/4	Logging		Fishing					6sxs of federal supreme	
Drill w/ air		Run Casing		WO cement						
Reaming	1 1/2	Cementing		Drill cement						
Rm Rathole		WOC		Safety Meeting						
Cond / Circ	10 1/4	NU BOP's		Mix mud						
Tripping	11	Test BOPs		W.O GEN						
Lubricate Rig		Drill Out Cmt								
Repair Rig	1/2	DST								
Fishing		Hndl Tools		Total Hrs	24					
24 HOUR SUMMARY FOR THE DATE :									MUD & CHEMICALS	
December 10, 2006 (0000 hrs - 2400 hrs)									MUD & CHEMICALS	
From	To	Duration	Event						MUD & CHEMICALS	
0:00	1:00	1.00	Build volume and mix hi vis mud						MUD & CHEMICALS	
1:00	2:00	1.00	RIH to 184 m						MUD & CHEMICALS	
2:00	2:45	0.75	Drill F 184 m to 186.5 m						MUD & CHEMICALS	
2:45	3:30	0.75	POOH to 86 m						MUD & CHEMICALS	
3:30	10:00	6.50	Build volume and mix hi vis mud						MUD & CHEMICALS	
10:00	12:00	2.00	RIH ream from 107 to 121 m						MUD & CHEMICALS	
12:00	13:00	1.00	POOH to 86 m						MUD & CHEMICALS	
13:00	15:00	2.00	Circulate and condition mud						MUD & CHEMICALS	
15:00	19:00	4.00	RIH feam to 110 m,						MUD & CHEMICALS	
19:00	20:00	1.00	POOH to 86 m						MUD & CHEMICALS	
20:00	20:30	0.50	Work on mud pump						MUD & CHEMICALS	
20:30	22:00	1.50	Ream from 110 to 181 m						MUD & CHEMICALS	
22:00	22:45	0.75	Circulate hole clean						MUD & CHEMICALS	
22:45	0:00	1.25	POOH to 86 m						MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	
									MUD & CHEMICALS	

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1					REPORT #:	15	DATE:	December 12, 2006
DEPTH 24:00:	184.5 m	PROGRESS:			Last 24 Hr Rotating Time:		Ave ROP:	
OPER 09:00:	Circulating. Wait on cement.			FOREMAN:		MOBILE NO.: 709-689-9673		
DAILY COST:	HOLE CND.:		Good		WEATHER:	Rain	TOOLPUSH:	Bill Williams
CUM COST:	RIG / RIG #:		Ingersoll Rand RD10		TEMP.:	3°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:		3.3 m		ROADS:	Good		
BIT PERFORMANCE			SURVEYS		DRILLING FLUID		PUMPS	
Bit No.	2RR3			141 m	1.00 °	Time	2400	Pump No. 1
Size (mm)	216					Depth(m)		Make Gardner Denver
Mfg.	REED					Density	1080	Model PY-7
Type	38 E					Mud Grad		Liner X Stk 6"
Serial #	136604					Vis	50	SPM 40
Nozzles						PV		Pump Eff. 95%
From (mKB)	184.5					YP		Pump Rate 0.39
To (mKB)	186.5					Gels		Pump Press. 350 kPa
Hrs on Bit	3/4					pH		Drillpipe AV m/min
WOB (daN)						WL (cc's)		Drillcollar AV m/min
RPM	90					Filter Cake		Nozzle Vel m/sec
Condition	Good					Sand (%)		
Pulled For?	Casing					Solids (%)		
Meters	2					Oil (%)		
m/hr	2.67					Pf/Mf		
Cum Hrs	17 3/4					MBT		
Cum m/hr	1.94					Cl (ppm)		
BOTTOMHOLE ASSEMBLY						Ca (ppm)		
No.	Item	Max OD	Min ID	Connection Size & Type				
1	Bit	8.5-in		3-1/2" Reg				
2	Stabilizer	8-in		2-7/8" IF				
3	Drill Collars	4.75-in		3-1/2" IF				
BHA Length:		10.17	Hook Load:	DP size	4.5"			
Avail WOB:			Jts DP Racks	DC Conn:	3-1/2" IF			
Jts DP in hole:			DP on Loc:	DP Conn:	2-7/8" IF			
DRILLING OPERATIONS TIME BREAKDOWN								
RU / TO		Survey		Move Rig				
Drill w/ fluid		Logging		Fishing				
Drill w/ air		Run Casing	7 1/2	WO cement				
Reaming		Cementing		Drill cement				
Rm Rathole		WOC		Safety Meeting				
Cond / Circ		NU BOP's		Mix mud				
Tripping		Test BOPs		W.O GEN				
Lubricate Rig		Drill Out Cmt						
Repair Rig		DST						
Fishing		Hndle Tools		Total Hrs	24	Act Hole Fill		
24 HOUR SUMMARY FOR THE DATE :					December 11, 2006 (0000 hrs - 2400 hrs)			
From	To	Duration	Event					
0:00	12:00	12.00	Three wiper tripes from 181 m to 86 m					
12:00	13:30	1.50	Ran in hole to 181 m, circulated and conditioned mud					
13:30	16:30	3.00	Pulled out of hole, rigged down divertor and layed out BHA					
16:30	19:00	2.50	Rigged up to run casing					
19:00	0:00	5.00	Ran 177 mm casing to 85 m.					
24 HOUR Forcast :								
Cement 177 mm casing @ 180 m								

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1					REPORT #:	16	DATE:	December 13, 2006
DEPTH 24:00: 186.5 m		PROGRESS: Wait on cement for top job.			Last 24 Hr Rotating Time:		Ave ROP:	
OPER 09:00: Wait on cement for top job.					FOREMAN:		MOBILE NO.: 709-689-9673	
DAILY COST:		HOLE CND.: Good		WEATHER: Clear		TOOLPUSH: Bill Williams		
CUM COST:		RIG / RIG #: Ingersoll Rand RD10		TEMP.: -4°C		T.P. MOBILE:		
FORMATION:		K.B. ELEV.: 3.3 m		ROADS: Good				
BIT PERFORMANCE					SURVEYS		DRILLING FLUID	
Bit No.				141 m 1.00 °			PUMPS	
Size (mm)					Time		Pump No.	1
Mfg.					Depth(m)		Make	Gardner Denver
Type					Density		Model	PY-7
Serial #					Mud Grad		Liner X Stk	6"
Nozzles					Vis		SPM	40
From (mKB)					PV		Pump Eff.	95%
To (mKB)					YP		Pump Rate	0.39
Hrs on Bit					Gels		Pump Press.	350 kPa
WOB (daN)					pH		Drillpipe AV	m/min
RPM					WL (cc's)		Drillcollar AV	m/min
Condition					Filter Cake		Nozzle Vel	m/sec
Pulled For?					Sand (%)			
Meters					Solids (%)			
m/hr					Oil (%)			
Cum Hrs					Pf/Mf			
BOTTOMHOLE ASSEMBLY					Ca (ppm)			
No.	Item	Max OD	Min ID	Connection Size & Type				
1								
2								
3								
BHA Length:		Hook Load:		DP size	4.5"			
Avail WOB:		Jts DP Racks		DC Conn:	3-1/2" IF			
Jts DP in hole:		DP on Loc:		DP Conn:	2-7/8" IF			
DRILLING OPERATIONS TIME BREAKDOWN								
RU / TO		Survey		Move Rig				
Drill w/ fluid		Logging		Fishing				
Drill w/ air		Run Casing	2 1/2	WO cement				
Reaming		Cementing	1	Drill cement				
Rm Rathole		WOC	9	Safety Meeting				
Cond / Circ		NU BOP's		Mix mud				
Tripping		Test BOPs		W.O GEN				
Lubricate Rig		Drill Out Cmt						
Repair Rig		DST						
Fishing		Hndl Tools		Total Hrs	24			
					Act Hole Fill			
					Boiler Hrs:	(to 24:00)		
24 HOUR SUMMARY FOR THE DATE :					December 12, 2006 (0000 hrs - 2400 hrs)			
From	To	Duration	Event					
0:00	2:30	2.50	Continue to run 177.8mm casing from 85m to 180m.					
2:30	14:00	11.50	Circulate casing and condition mud.					
14:00	15:00	1.00	Pump 1m ³ water preflush, 5m ³ 1820-kg/m class A cement. Displace with 3m ³ water. No cement returns.					
15:00	0:00	9.00	Wait on cement. Clean out pump and surface lines.					
24 HOUR Forecast :								
Cut casing, cement top job, install wellhead, rig up BOPS								

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1					REPORT #: 17	DATE: December 14, 2006		
DEPTH 24:00: 186.5 m		PROGRESS:			Last 24 Hr Rotating Time:			
OPER 09:00: Pressure Test BOPs					Ave ROP: 709-689-9673			
DAILY COST:		HOLE CND.: Good			FOREMAN: Clear			
CUM COST:		RIG / RIG #: Ingersoll Rand RD10			WEATHER: 2°C			
FORMATION:		K.B. ELEV.: 3.3 m			TEMP.: 2°C			
					ROADS: Good			
BIT PERFORMANCE			SURVEYS		DRILLING FLUID		PUMPS	
Bit No.			141 m	1.00 °	Time		Pump No. 1	
Size (mm)					Depth(m)		Make Gardner Denver	
Mfg.					Density		Model PY-7	
Type					Mud Grad		Liner X Stk 6"	
Serial #					Vis		SPM 40	
Nozzles					PV		Pump Eff. 95%	
From (mKB)					YP		Pump Rate 0.39	
To (mKB)					Gels		Pump Press. 350 kPa	
Hrs on Bit					pH		Drillpipe AV m/min	
WOB (daN)					WL (cc's)		Drillcollar AV m/min	
RPM					Filter Cake		Nozzle Vel m/sec	
Condition					Sand (%)			
Pulled For?					Solids (%)			
Meters					Oil (%)			
m/hr					Pf/Mf			
Cum Hrs					MBT			
BOTTOMHOLE ASSEMBLY					Ca (ppm)		Cl (ppm)	
No.	Item	Max OD	Min ID	Connection Size & Type				
1								
2								
3								
BHA Length:		Hook Load:		DP size	4.5"			
Avail WOB:		Jts DP Racks		DC Conn:	3-1/2" IF			
Jts DP in hole:		DP on Loc:		DP Conn:	2-7/8" IF			
DRILLING OPERATIONS TIME BREAKDOWN						VOLUMES M ³		
RU / TO		Survey		Move Rig		Water added	Mud Daily Cost	
Drill w/ fluid		Logging		Fishing		Losses	Mud Cum Cost	
Drill w/ air		Run Casing		WO Materials				
Reaming		Cementing	1 1/2	WO Services				
Rm Rathole		WOC	9 1/2	Safety Meeting				
Cond / Circ		NU BOP's	1 1/2	Mix mud				
Tripping		Test BOPs		Install Wellhead	4 1/2			
Lubricate Rig		Drill Out Cmt			7			
Repair Rig		DST						
Fishing		Hndl Tools		Total Hrs	24			
24 HOUR SUMMARY FOR THE DATE : December 13, 2006 (0000 hrs - 2400 hrs)								
From	To	Duration	Event					
0:00	3:00	3.00	Wait on cement.					
3:00	4:30	1.50	Nipple down diverter.					
4:30	9:00	4.50	Wait on cement services for cement top job.					
9:00	10:00	1.00	Fill backside of casing with 2m3 1800-kg/m3 class A cement. No cement returns to surface.					
10:00	17:00	7.00	Cut 177.8mm casing and weld on casing bowl. Wait on cement.					
17:00	17:30	0.50	Fill backside of casing with 0.75m3 1800-kg/m3 class A cement. Cement returns to surface.					
17:30	0:00	6.50	Wait on cement.					
24 HOUR Forecast :								
Nipple up BOPs, test BOPs, drill out cement and conduct FIT.								

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1					REPORT #: 18	DATE: December 15, 2006		
DEPTH 24:00: 186.5 m		PROGRESS:			Last 24 Hr Rotating Time:			
OPER 09:00: RIH With tricone bit					Ave ROP:			
DAILY COST:		HOLE CND.: Good			FOREMAN:			
CUM COST:		RIG / RIG #: Ingersoll Rand RD10			MOBILE NO.: 709-689-9673			
FORMATION:		K.B. ELEV.: 3.3 m			WEATHER: Clear			
		TEMP.: 4°C			TOOLPUSH: Bill Williams			
		ROADS: Good			T.P. MOBILE:			
BIT PERFORMANCE			SURVEYS		DRILLING FLUID	PUMPS		
Bit No.			141 m	1.00 °	Time	Pump No. 1		
Size (mm)					Depth(m)	Make Gardner Denver		
Mfg.					Density	Model PY-7		
Type					Mud Grad	Liner X Stk 6"		
Serial #					Vis	SPM 40		
Nozzles					PV	Pump Eff. 95%		
From (mKB)					YP	Pump Rate 0.39		
To (mKB)					Gels	Pump Press. 350 kPa		
Hrs on Bit					pH	Drillpipe AV m/min		
WOB (daN)					WL (cc's)	Drillcollar AV m/min		
RPM					Filter Cake	Nozzle Vel m/sec		
Condition					Sand (%)			
Pulled For?					Solids (%)			
Meters					Oil (%)			
m/hr					Pf/Mf			
Cum Hrs					MBT			
					Cl (ppm)			
					Ca (ppm)			
BOTTOMHOLE ASSEMBLY								
No.	Item	Max OD	Min ID	Connection Size & Type				
1	Bit							
2	Stabilizer							
3	Drill Collars							
BHA Length:	10.17	Hook Load:		DP size	4.5"			
Avail WOB:		Jts DP Racks		DC Conn:	3-1/2" IF			
Jts DP in hole:		DP on Loc:		DP Conn:	2-7/8" IF			
DRILLING OPERATIONS TIME BREAKDOWN								
RU / TO	1 1/2	Survey		Move Rig				
Drill w/ fluid		Logging		Fishing				
Drill w/ air		Run Casing		WO Materials				
Reaming	1 3/4	Cementing		WO Services				
Rm Rathole		WOC		Safety Meeting	1/4			
Cond / Circ		NU BOP's	4	Mix mud				
Tripping	5 1/4	Test BOPs	6 1/2	Install Wellhead				
Lubricate Rig		Drill Out Cmt	1 1/4	M/U BHA	1/2			
Repair Rig	3	DST		Total Hrs	24			
Fishing		Hndl Tools						
24 HOUR SUMMARY FOR THE DATE :								
December 14, 2006 (0000 hrs - 2400 hrs)								
From	To	Duration	Event					
0:00	4:00	4.00	Nipple up BOP's and choke manifold					
4:00	4:30	0.50	Rig up to test BOP's					
4:30	5:00	0.50	Fill casing, Make up cup tester					
5:00	11:00	6.00	Pressure test, 200 psi - low, 800 psi high, - 15 min. annular preventor, pipe rams, kill and HCR valves					
			choke line and choke manifold. Test blind rams - casing					
11:00	11:30	0.50	Function test accumulator. Start pressure 1500 psi. Open HCR, close annular and pipe rams.					
			Remaining pressure- 1250 psi. Time to recharge 40 secs.					
11:30	12:00	0.50	Nipple up flow line					
12:00	12:30	0.50	Make up air hammer					
12:30	14:00	1.50	RIH, tagged cement @ 149 m.					
14:00	15:30	1.50	Hammer failed to function.					
15:30	16:30	1.00	POOH					
16:30	18:00	1.50	Worked on hammer					
18:00	20:45	2.75	Make up tricone bit and run in to 149 m.					
20:45	22:00	1.25	Drilled cement from 149 m to 180 m with air					
22:00	22:15	0.25	Held BOP drill prior to drilling out shoe.					
22:15	0:00	1.75	Reamed rathole from 180 m to 183 m.					
24 HOUR Forcast :								

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1			REPORT #:	19	DATE:	December 16, 2006
DEPTH 24:00:	186.5 m	PROGRESS:	Last 24 Hr Rotating Time:			Ave ROP:
OPER 09:00:				FOREMAN:	MOBILE NO.:	
DAILY COST:	HOLE CND.:	Good	WEATHER:	Rain	TOOLPUSH:	Bill Williams
CUM COST:	RIG / RIG #:	Ingersoll Rand RD10	TEMP.:	4°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	3.3 m	ROADS:	Good		

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1			REPORT #:	20	DATE:	December 17, 2006
DEPTH 24:00:	186.5 m	PROGRESS:	Last 24 Hr Rotating Time:			Ave ROP:
OPER 09:00:	RIH			FOREMAN:	MOBILE NO.: 709-689-9673	
DAILY COST:	HOLE CND.:	Good	WEATHER:	Rain	TOOLPUSH:	Bill Williams
CUM COST:	RIG / RIG #:	Inggersoll Rand RD10	TEMP.:	4°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	3.3 m	ROADS:	Good		

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1			REPORT #:	21	DATE:	December 18, 2006
DEPTH 24:00:	186.5 m	PROGRESS:	Last 24 Hr Rotating Time:			Ave ROP:
OPER 09:00:				FOREMAN:	MOBILE NO.: 709-689-9673	
DAILY COST:	HOLE CND.:	Cased	WEATHER:	Cloudy	TOOLPUSH:	Bill Williams
CUM COST:	RIG / RIG #:	Ingersoll Rand RD10	TEMP.:	2°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	3.3 m	ROADS:	Good		

24 HOUR SUMMARY FOR THE DATE :

December 17, 2006 (0000 hrs - 2400 hrs)

24 HOUR Forecast :

RIH. Feel plug. Pull out and spot surface cement plug

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1			REPORT #:	22	DATE:	December 19, 2006
DEPTH 24:00:	186.5 m	PROGRESS:	Last 24 Hr Rotating Time:			Ave ROP:
OPER 09:00:	Tear out rig			FOREMAN:	MOBILE NO.:	
DAILY COST:	HOLE CND.:	Cased	WEATHER:	Cloudy	TOOLPUSH:	Bill Williams
CUM COST:	RIG / RIG #:	Ingersoll Rand RD10	TEMP.:	2°C	T.P. MOBILE:	
FORMATION:	K.B. ELEV.:	3.3 m	ROADS:	Good		

24 HOUR SUMMARY FOR THE DATE :

December 18, 2006 (0000 hrs - 2400 hrs)

24 HOUR Forecast :

Tear out and move rig and rentals