



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 Sidetracted 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 Horizontal Drift	Cumulative Deviation	Measurement Tool
		(Assuming constant Azimuth)		
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.

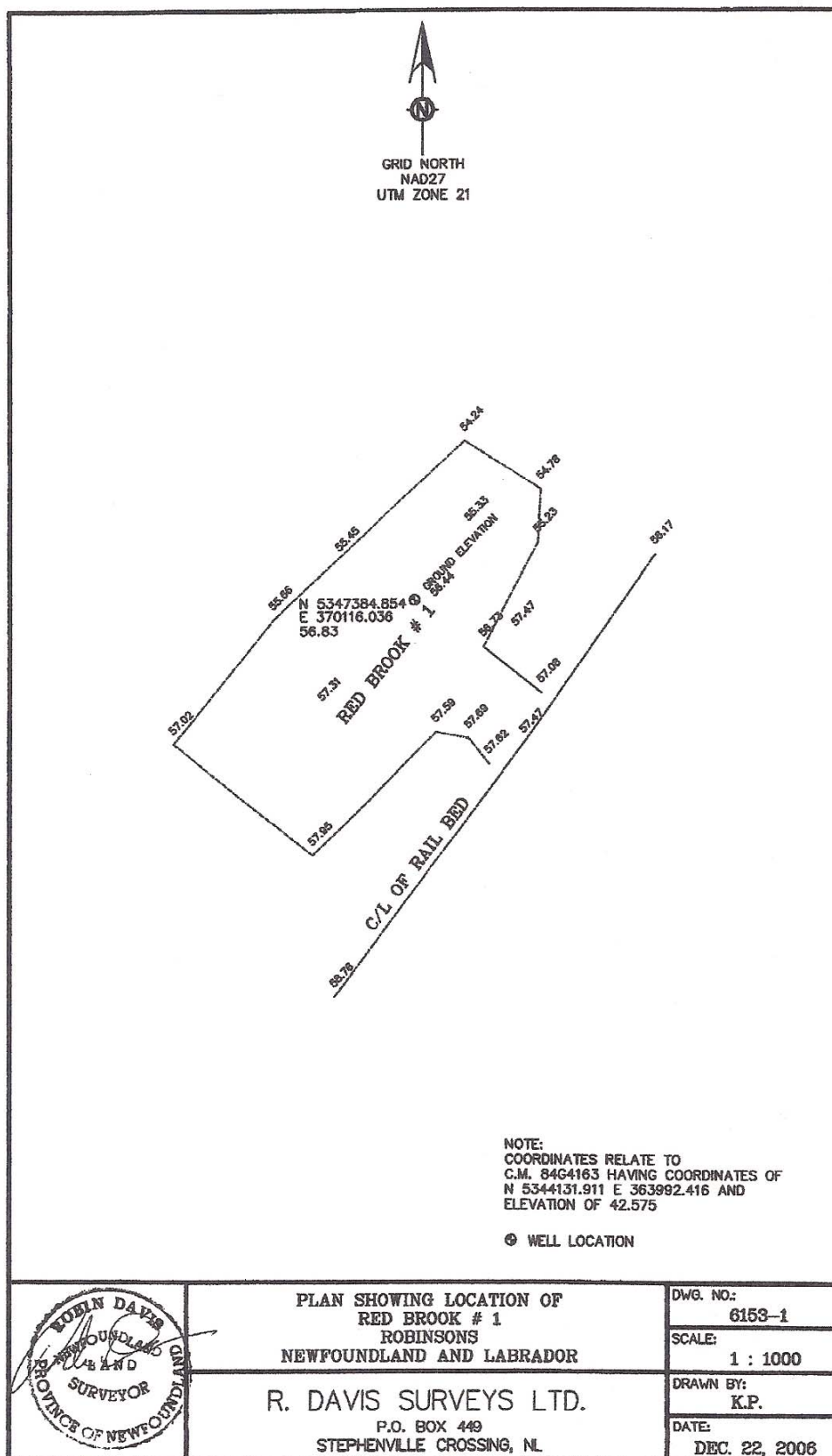
6.6 Formation Stimulation

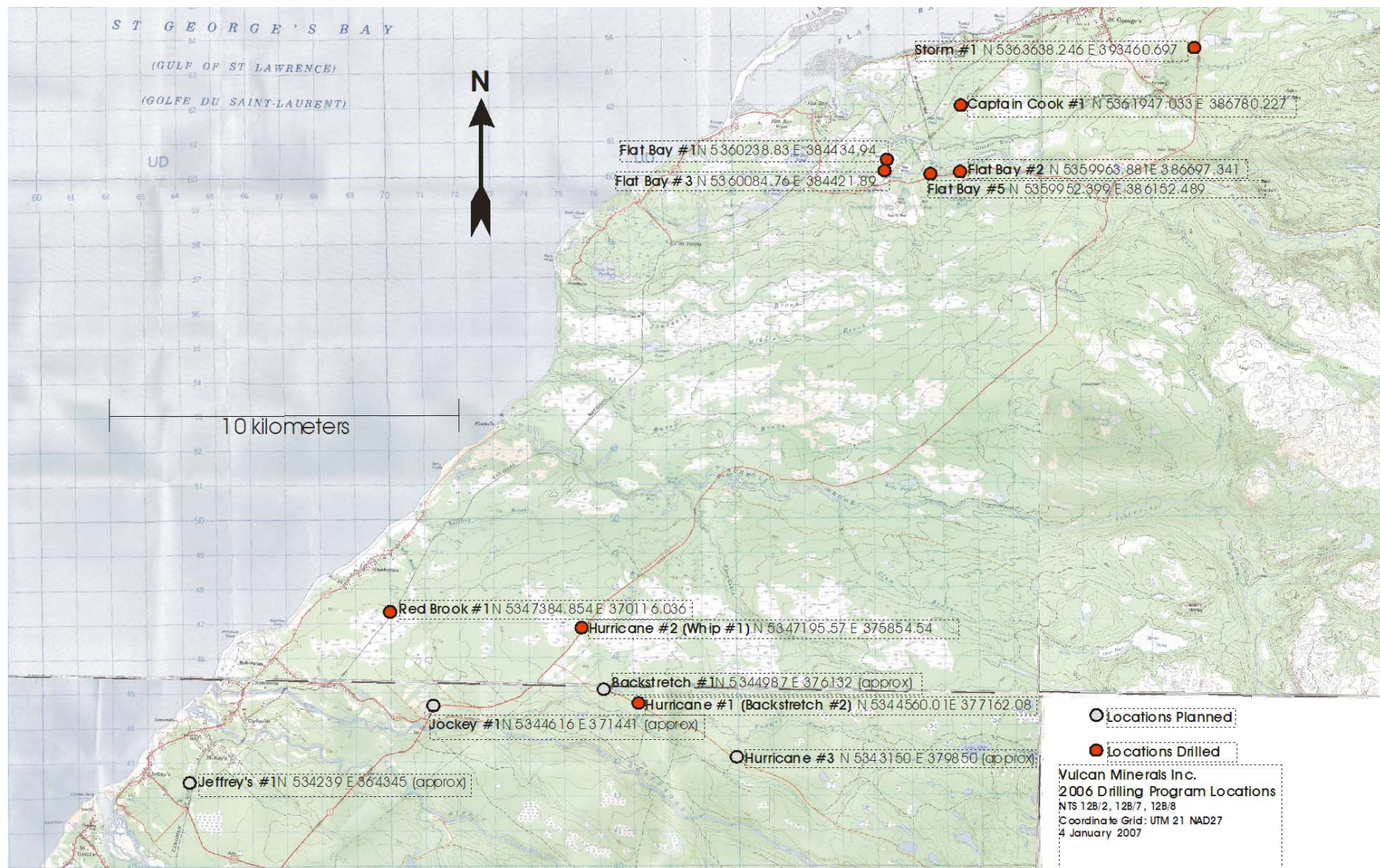
Not applicable.

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 LABRADOR
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: 96-105/03-106/03-107

(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: [Signature]
Operator's Representative

Date: Sept 22/06

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: [Signature]
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 and in compliance with section 29 of the Petroleum Drilling Regulations, Vulcan Minerals Inc. as 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 20 Sept 2006
Permit, Licence or Lease to which this Program applies: 02-107

Area: Western Newfoundland	CO-ORDINATES	
Field/Tool: Bay of St. Georges	Long:	UTM (MAD 17) Northing: 5347345 m Easting: 370135 m
Drilling Rig: Ingersoll Rand R010	Lat:	
Rig Type: Single Hydraulic	ELEVATION	DEPTH
Drilling Contractor: Vulcan Minerals	RT/KR/RP: GL.: 150m	T.D.: 1000 m TVD: 1000 m
ESTIMATES		TARGET HORIZONS
Spud Date: 1 October 2006	Well Cost: \$700,000	Anquille Conglomerate/Sands
Days on Location: 20		

EVALUATION PROGRAM

Ten-metre sample intervals: During high ROP rates	Conventional cores at: N/A
Five-metre sample intervals: 60m - 1800m	Logs and Tests:
Caged sample intervals: N/A	WTS Newton, HDI, Denslog, GR Atomic, Caliper

CASING AND CEMENTING PROGRAM

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m)	Cementing Program
215	53.6	J-55	60	Class A
177.8	25.3	H-40	250	Class A
14.3	14.1	J-55	1000	Class A

Other Equipment:

21 MPa - BOP, intake head and annular preventer

The undersigned operator/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: [Signature]
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 logs 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. 2008-116-01 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: John
Director

Effective Date: October 16, 2006

Authority to Drill a Well No. 2000-116-01-01

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
Cell: 709 689 6973

Karla Smith, P.Eng
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 m ³	4.99 m ³

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/m³ (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.

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 0.5m^3 of freshwater spacer.
8. Pump pre-mix cement (estimated 5.00 m^3 with shoe at 180-m, 3-m rig elevation to ground level, and 150% excess required) at a rate of approximately $0.3\text{-m}^3/\text{min}$. 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 m^3 assuming shoe at 180-m and 45-m shoe track) at a rate of $0.6\text{-m}^3/\text{min}$ assuming 95% pumping efficiency.
12. For the last 0.5m^3 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

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			Easting :	370116.036m
Drilling Contractor:	Vulcan Minerals Inc.	ELEVATION		DEPTH	
		<input type="checkbox"/> RT	<input type="checkbox"/> KB	<input checked="" type="checkbox"/> RF	m
		G.L.:	56.44m	M.D.:	186.5m
				T.V.D.:	186.5m
FOR NR USE ONLY					
Spud Date:	November 27, 2006	For the purpose of interpreting subsection 154 (5) of the Petroleum Drilling Regulations, the rig release date is deemed to be:			
T.D. Date:	December 10, 2006				
Rig Release Date:	December 18, 2006				
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	5.0m3 class A 1820-ka/m3 cement, cement returns
177.8	25.6	H-40	180m	5.0m3 class A 1820-ka/m3 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 0.85m3 class A 1820-ka/m3 cement
Cement	28-15m	none	0.35m3 class A 1820-ka/m3 cement

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

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

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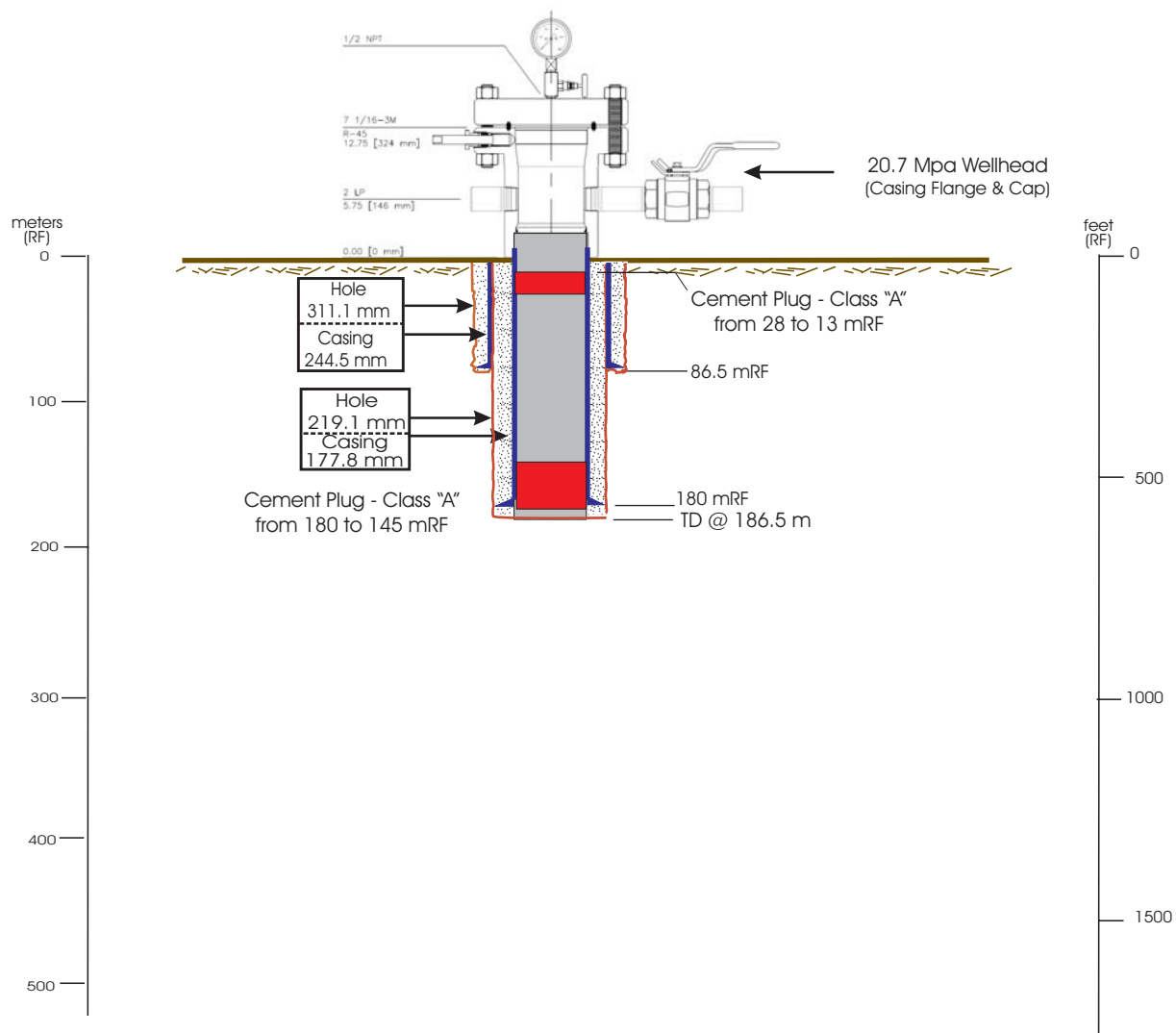
DECLARATION

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 LARAY Title President
Signed Patrick Laray Date Dec 22/06.

ACKNOWLEDGEMENT

Acknowledged by: W. Foote Date: JAN. 5/07
Director



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

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



Depth	Lithology	Lithology	ROP		Casing Scheme	Drilling Data				DF & Cementing			Remarks											
	Description	Column	Gas Curve	ROP (min/m)		Deviation:	Bit:	BHA:	Comments:	Drilling Fluid:	Cement:	Comments:												
			0	10																				
			0	1																				
0	Overburden 0m to 86m				244.5-mm 53.6-kg/m @ 86-m																			
25														Sandstone 86m to 123m										
50																								
75																								
100													Andydrite 123m to 165m											
125																								
150													Sandstone 165m to 186.5m											
175																								
200																								
225																								
REMARKS: Licence 03-107 Spud Date: Nov 27, 2006 @ 08:30 Rig Release: Dec 18, 2006 @ 12:00																								
Rig: Vulcan Minerals Inc. Ingersoll Rand RD-10 Total Operational Hours: 506.00 Percentage Operational NPT: 60.0%																								

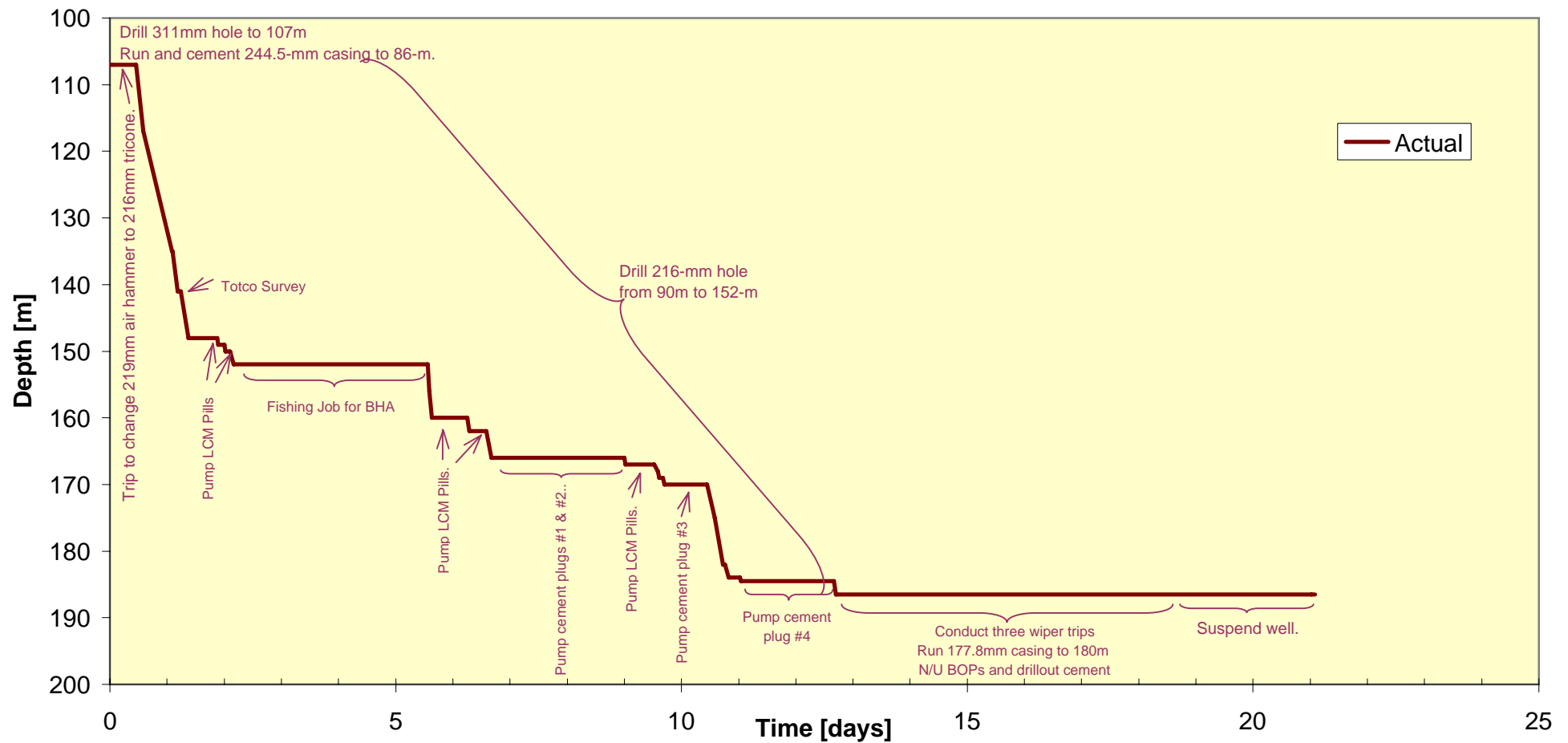


Operating Company
Well Name
Rig
Field

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.Geol

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>K.B. ELEVATION: 59.77 m</u>	
<u>Formation</u>	<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.

[illegible]

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
Spud Date: 11/24/2006
Surface Coordinates: Northing: 534384.854
Easting: 370116.036.036
Bottom Hole Coordinates: As above, vertical Hole
Ground Elevation (m): 56.44m
Logged Interval (m): 80 To: 184
Formation: Devonian
Type of Drilling Fluid: Gel
K.B. Elevation (m): 59.77m
Total Depth (m): 18.5
Region: ROBINSONS, NL
Drilling Completed: Susp. 12/20/2006
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

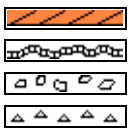
GEOLOGIST

Name: Jeffrey Hearn B.Sc
Company: East Rock Geoconsulting
Address: 1816 Crowchild Tr. N.W.
Calgary, AB T2M 3Y7
Tel: (403) 313-5902

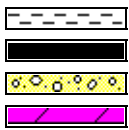
Comments

Conductor Pipe Set at 86m KB (244.5mm)
Surface Casing Set at 186.5m KB (177.8mm)

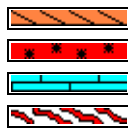
ROCK TYPES



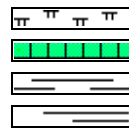
Anhy
Bent
Brec
Cht



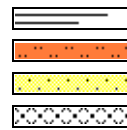
Cyst
Coal
Congl
Dol



Gyp
Igne
Lmst
Meta



Mrst
Salt
Shale
Shcol



Shgy
Sltst
Ss
Till

ACCESSORIES

MINERAL

Anhy
 Arggrn
 Arg
 Bent
 Bit
 Breccfrag
 Calc
 Carb
 Chtdk
 Chtlt
 Dol
 Feldspar
 Ferrpel
 Ferr
 Glau

Gyp
 Hvymin
 Kaol
 Marl
 Minxl
 Nodule
 Phos
 Pyr
 Salt
 Sandy
 Silt
 Sil
 Sulphur
 Tuff

FOSSIL

Algae
 Amph
 Belm
 Bioclst
 Brach
 Bryozoa
 Cephal
 Coral
 Crin
 Echin
 Fish
 Foram
 Fossil
 Gastro
 Oolite

Ostra
 Pelec
 Pellet
 Pisolite
 Plant
 Strom

STRINGER

Anhy
 Arg
 Bent
 Coal
 Dol
 Gyp
 Ls
 Mrst

Sltstrg
 Ssstrg

TEXTURE

Boundst
 Chalky
 Cryxln
 Earthy
 Finexln
 Grainst
 Lithogr
 Microxln
 Mudst
 Packst
 Wackest

OTHER SYMBOLS

POROSITY

Earthy
 Fenest
 Fracture
 Inter
 Moldic
 Organic
 Pinpoint

Vuggy

Vuggy

SORTING

Well
 Moderate
 Poor

ROUNDING

Rounded
 Subrnd
 Subang
 Angular

Spotted
 Ques
 Dead

Spotted

Ques

Dead

INTERVAL

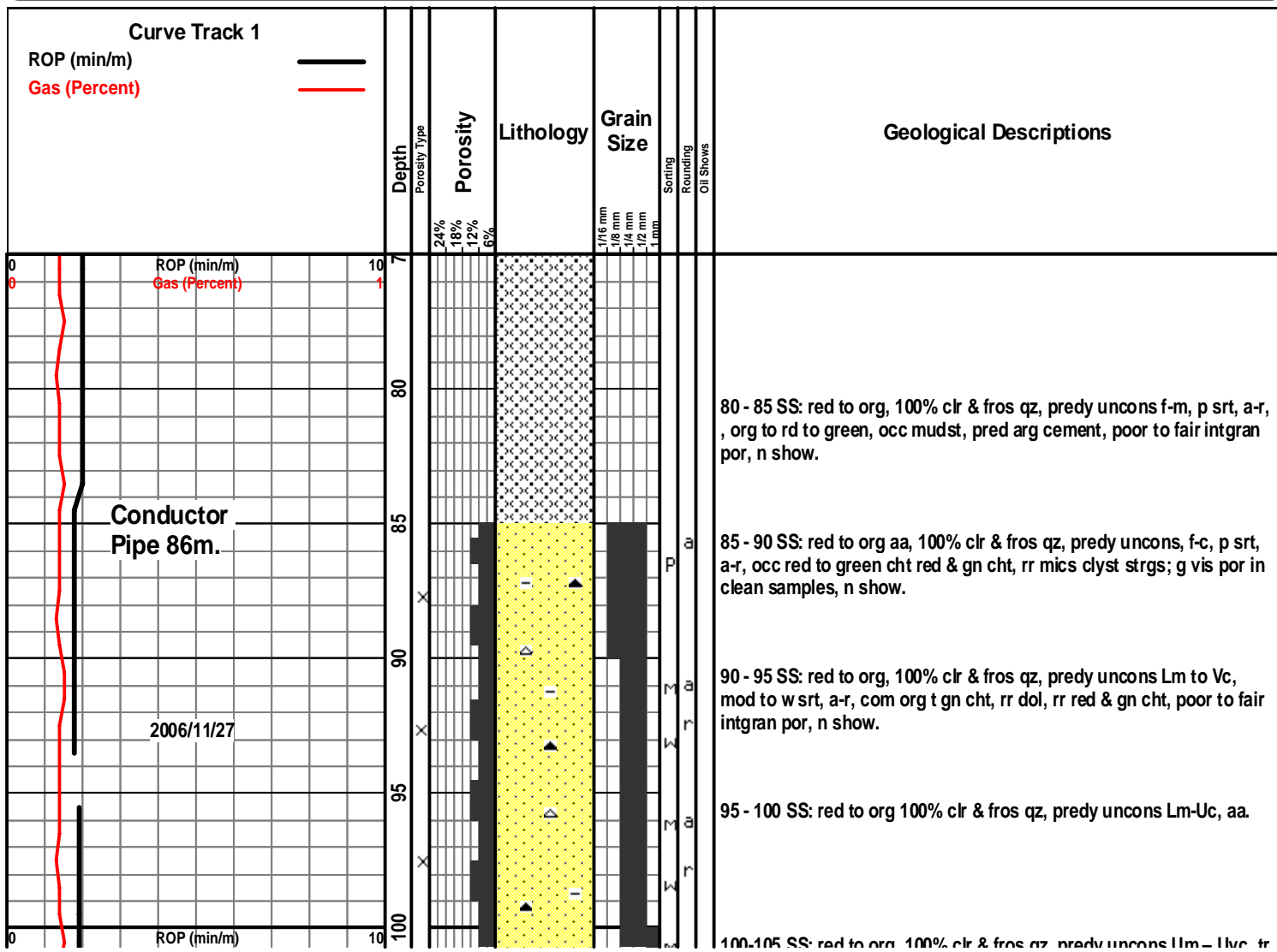
Core
 Dst

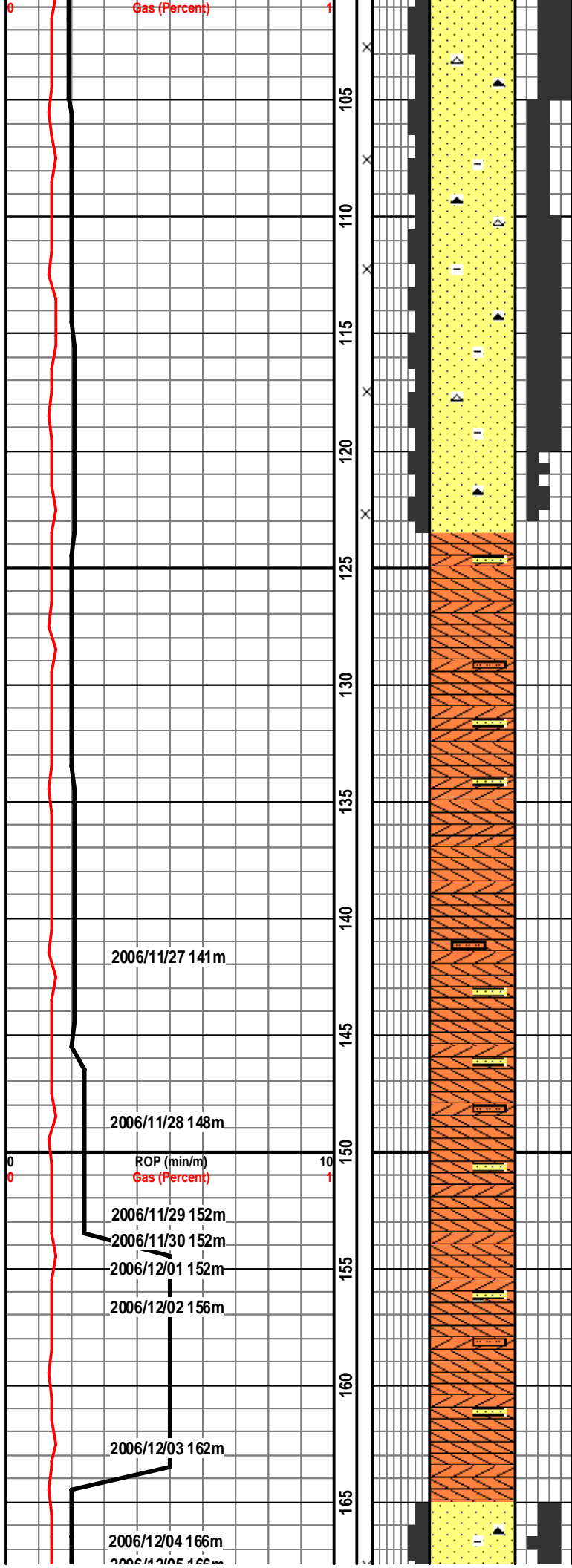
EVENT

Rft
 Sidewall

OIL SHOW

Even





100-105 SS: red to org, 100% clr & fros qz, predy unconcs Um - Gvc, n lf - lm, 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 unconcs, 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 unconcs, Uf to Uc, mod to w srt, a-r, aa.

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

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

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

130-135 GYP: 100% selenite to alabaster.

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

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

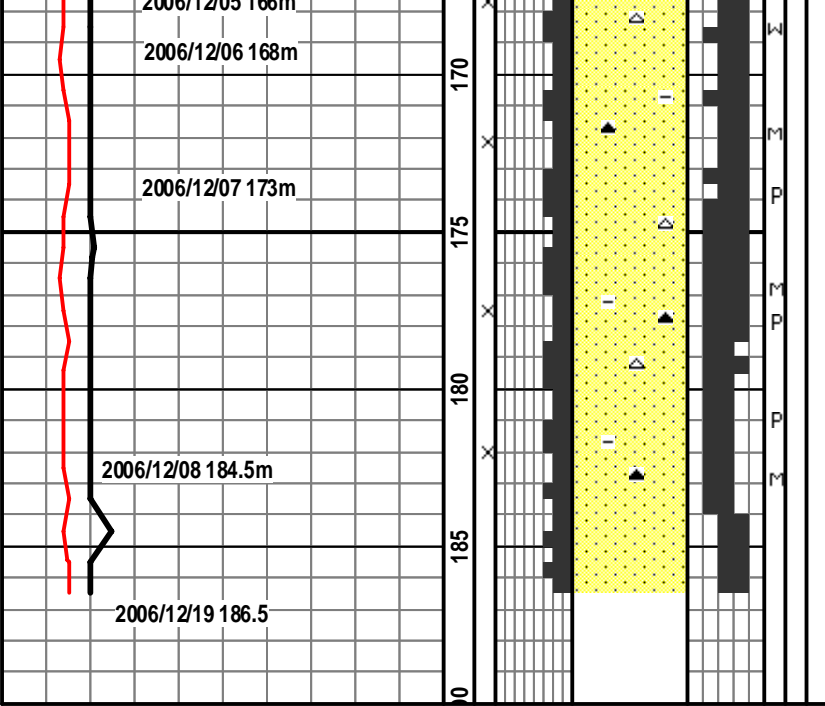
145-150 GYP: 100% selenite, rr alabaster (urbanite disclosed though majority of sample)

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

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

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

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



170-175 SS: red to org, 100% clr & fros qz, predy uncons, Um – Uvc, tr
lf - lm, mod to w srt, pred arg cmt, poor to fair intgran por, n show.

175-180 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.

180-186.5 SS: red to org, 100% clr & fros qz, occ red to org cht, predy
uncons, Uf – Um, com Vf Lf, mod to w srt, a – r, occ A, pred red 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

Red Brook # 1				REPORT #: 1		DATE: November 28, 2006	
DEPTH 24:00: 117.0 m		PROGRESS: 10.0 m		Last 24 Hr Rotating Time: 3.00 hr		Ave ROP: 3.3 m/hr	
OPER 09:00: Drilling				FOREMAN: Bill Williams		MOBILE NO.: 709-689-9673	
DAILY COST:		HOLE CND.: Good		WEATHER: Clear		TOOLPUSH:	
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.	219	1			Time	2400	
Size (mm)	Mission	Security			Depth(m)	1050	
Mfg.	Air Hammer	J-22			Density	65	
Type	B98290	11584			Mud Grad		
Serial #		Open			Vis		
Nozzles		107			PV		
From (mKB)		117			YP		
To (mKB)		3			Gels		
Hrs on Bit	2				pH		
WOB (daN)		90			WL (cc's)		
RPM	20	good			Filter Cake		
Condition	good				Sand (%)		
Pulled For?	water				Solids (%)		
Meters		10			Oil (%)		
m/hr		3.3333333			Pf/Mf		
Cum Hrs					MBT		
					CI (ppm)		
					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				VOLUMES M³			
RU / TO	2	Survey		Move Rig			
Drill w/ fluid	3	Logging		Fishing			
Drill w/ air		Run Casing					
Reaming	2	Cementing					
Rm Rathole		WOC		Safety Meeting	1/2		
Cond / Circ		NU BOP's		Mix mud			
Tripping	5 1/2	Test BOPs		Mix LCM			
Lubricate Rig		Drill Out Cmt	5		6		
Repair Rig		DST					
		Hndle Tools		Total Hrs	24		
24 HOUR SUMMARY FOR THE DATE :				November 27, 2006 (0000 hrs - 2400 hrs)			
From	To	Duration	Event				
0:00	2:00	2.00	Rig up diverter and lines				
2:00	3:00	1.00	Run in hole with air hammer, tag cement @ 50 m.				
3:00	7:00	4.00	Drilled cement from 50 m to 80 m.				
7:00	7:30	0.50	Held pre spud safety meeting				
7:30	8:30	1.00	Drilled cement from 50 m to 86 m. Drilledout shoe @ 86 m. Ream to 90 m.				
8:30	11:00	2.50	Pulled out of hole due to water in returns @ 40 gal/min. Rigged down diverter.				
11:00	12:00	1.00	Made up tricone bit.				
12:00	13:00	1.00	Rig up diverter and run in hole				
13:00	14:00	1.00	Attempt to fill hole with drilling fluid- no returns				
14:00	19:00	5.00	Mixed and spotted LCM pills. - full returns				
19:00	21:00	2.00	Reamed from 87 m to 107 m.				
21:00	0:00	3.00	Drilled 216 mm hole from 107 m to 117 m.				
24 HOUR Forecast :							
Continue to drill 216mm hole section to casing point.							
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 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							

DAILY DRILLING REPORT

Mix LCM Pills attempt to stop losses and Drill ahead.

DAILY DRILLING REPORT

[illegible]

DAILY DRILLING REPORT

24 HOUR Forecast :

Wait on fishing tools. M/U 8 1/8" overshot RIH and recover fish. Static Losses in 24 hrs 0.8M3

DAILY DRILLING REPORT

[illegible]

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
Size (mm)	216	216				Depth(m)	
Mfg.	Security	REED				Density	1050
Type	J-22	38 E				Mud Grad	
Serial #	11584	136604				Vis	60
Nozzles						PV	
From (mKB)	107	152				YP	
To (mKB)	152	156				Gels	
Hrs on Bit	23	1/2				pH	10
WOB (daN)						WL (cc's)	
RPM	90	90				Filter Cake	
Condition	seals failed					Sand (%)	
Pulled For?	TW					Solids (%)	
Meters	45	4				Oil (%)	
m/hr	1.96	8.00				Pt/Mf	
						MBT	
						Cl (ppm)	
						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				VOLUMES M ³			
RU / TO		Survey		Move Rig			
Drill w/ fluid	1/2	Logging		Fishing	1		
Drill w/ air		Run Casing					
Reaming	2	Cementing					
Rm Rathole		WOC		Safety Meeting			
Cond / Circ	15	NU BOP's	2	Mix mud			
Tripping	3 1/2	Test BOPs		W.O GEN			
Lubricate Rig		Drill Out Cmt		Total Hrs	24		
Repair Rig		DST					
Fishing		Hndle Tools					
				Mud Co.			
				Mud Man			
				Mud Up @			
				Mud & Chemicals Added:			
				6sxs of federal supreme			
				Mud Cycle 92 min			
				Bottoms Up 15 min			
				Tanks 30 m3			
				Hole Volume 6 m3			
				System Vol. 36 m3			
				Mud Daily Cost			
				Mud Cum Cost			
				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 FSI			
				Shaker Mesh 180			
				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 : 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

[illegible]

DAILY DRILLING REPORT

Wait on cement. RIH confirm top of cement and drill out cement.

DAILY DRILLING REPORT

24 HOUR Forecast :

Wait on cement. RIH confirm top of cement and drill out salt cement plug #2.

Vulcan Minerals

DAILY DRILLING REPORT

Red Brook # 1				REPORT #: 10		DATE: December 7, 2006	
DEPTH 24:00: 168.0 m		PROGRESS: 6.0 m		Last 24 Hr Rotating Time: 2.00 hr		Ave ROP: 3.5 m/hr	
OPER 09:00: Wait on Cement				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.	2RR			141 m	1.00 °	Time	2400	Pump No.	1
Size (mm)	216					Depth(m)		Make	Gardner Denver
Mfg.	REED					Density	1050	Model	PY-7
Type	38 E					Mud Grad		Liner X Stk	6"
Serial #	136604					Vis	65	SPM	40
Nozzles						PV		Pump Eff.	95%
From (mKB)	166					YP		Pump Rate	0.39
To (mKB)	168					Gels		Pump Press.	350 kPa
Hrs on Bit	2					pH	10	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	2					Oil (%)			
m/hr	1.00					Pt/Mf			
Cum Hrs	7					MBT			
Cum m/hr	2.29					Cl (ppm)			
						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	Logging		Fishing	
Drill w/ air		Run Casing		WO cement	5
Reaming		Cementing		Drill cement	
Rm Rathole		WOC		Safety Meeting	
Cond / Circ	7	NU BOP's		Mix mud	
Tripping	6	Test BOPs		W.O GEN	
Lubricate Rig		Drill Out Cmt	4		
Repair Rig		DST			
Fishing		Hndle Tools		Total Hrs	24

24 HOUR SUMMARY FOR THE DATE :		December 6, 2006 (0000 hrs - 2400 hrs)	
From	To	Duration	Event
0:00	5:00	5.00	Wait on cement. Mix & condition mud.
5:00	6:00	1.00	RIH from 86m to 153m. Top of cement.
6:00	10:00	4.00	Drill cement from 153m to 166m.
10:00	10:30	0.50	Drill 216mm hole ffrom 166m to 167m.
10:30	11:00	0.50	Pull back to shoe. Mix & condition mud.
11:00	14:00	3.00	Mix & spot LCM pill. Mix and condition mud.
14:00	14:45	0.75	RIH to 167m
14:45	15:30	0.75	Pull back to shoe. Mix & condition mud.
15:30	19:30	4.00	Mix and condition mud with LCM.
19:30	22:30	3.00	RIH and condition hole with hi vis mud.
22:30	0:00	1.50	Drill 216mm hole from 167m to 168m.

24 HOUR Forecast :			
Pump cement plug #3 @ 169M. WOC. RIH and drill ahead.			

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		Ave ROP: 1.6 m/hr	
OPER 09:00: Condition Mud				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.	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		Pump Press.	350 kPa
Hrs on Bit	3 1/4	3 1/4				pH	10	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/Mf			
Cum Hrs	8 1/4	11 1/2				MBT			
Cum m/hr	2.18	2.00				Cl (ppm)			
						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	4 1/2	Logging		Fishing	
Drill w/ air		Run Casing		WO cement	9 1/2
Reaming		Cementing	1	Drill cement	
Rm Rathole		WOC		Safety Meeting	
Cond / Circ	1 1/2	NU BOP's		Mix mud	
Tripping	3 1/2	Test BOPs		W.O GEN	
Lubricate Rig		Drill Out Cmt	3/4		
Rig Service	3 1/4	DST			
Fishing		Hndle Tools		Total Hrs	24

24 HOUR SUMMARY FOR THE DATE :		December 7, 2006 (0000 hrs - 2400 hrs)	
From	To	Duration	Event
0:00	0:45	0.75	Drill 216mm hole from 168m to 169m
0:45	2:15	1.50	Condition mud and build volume.
2:15	2:45	0.50	Drill 216mm hole from 169m to 170m
2:45	4:15	1.50	POOH Lay down BHA.
4:15	5:15	1.00	RIH with cement stinger to 83m.
5:15	8:30	3.25	Clean mud pump and prepair for cement plug # 3.
8:30	9:30	1.00	Hold TBT Pump water spacer, 3. m3 of 14.5 ppg cement & displace w/ 0.7m3 of water
9:30	19:00	9.50	POOH , Clean mud pump & equipment.M/U BHA & RIH to shoe. Condition mud. Wait on cement.
19:00	20:00	1.00	RIH from 83m to 165m. Top of cement.
20:00	20:45	0.75	Drill cement from 165m to 170m.
20:45	0:00	3.25	Drill 216mm hole from 170m to 175m.

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		Ave ROP: 1.7 m/hr	
OPER 09:00: Wait on Cement				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.	2RR2			141 m	1.00 °	Time	2400	Pump No.	1
Size (mm)	216					Depth(m)		Make	Gardner Denver
Mfg.	REED					Density	1040	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)	170					YP		Pump Rate	0.39
To (mKB)	184.5					Gels		Pump Press.	350 kPa
Hrs on Bit	8 3/4					pH	10.5	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	15					Oil (%)			
m/hr	1.66					Pt/Mf			
Cum Hrs	17					MBT			
Cum m/hr	1.91					Cl (ppm)			
						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	5 1/2	Logging		Fishing	
Drill w/ air		Run Casing		WO cement	
Reaming		Cementing	4 1/4	Drill cement	
Rm Rathole		WOC		Safety Meeting	
Cond / Circ	5 3/4	NU BOP's		Mix mud	
Tripping	8 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 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.			

DAILY DRILLING REPORT

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		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	70	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	10.5	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	2					Oil (%)			
m/hr	2.67					Pt/Mf			
Cum Hrs	17 3/4					MBT			
Cum m/hr	1.94					Cl (ppm)			
						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	3/4	Logging		Fishing
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 BOP's		W.O GEN
Lubricate Rig		Drill Out Cmt		
Repair Rig	1/2	DST		
Fishing		Hndle Tools		Total Hrs 24

24 HOUR SUMMARY FOR THE DATE :		December 10, 2006 (0000 hrs - 2400 hrs)	
From	To	Duration	Event
0:00	1:00	1.00	Build volume and mix hi vis mud
1:00	2:00	1.00	RIH to 184 m
2:00	2:45	0.75	Drill F 184 m to 186.5 m
2:45	3:30	0.75	POOH to 86 m
3:30	10:00	6.50	Build volume and mix hi vis mud
10:00	12:00	2.00	RIH ream from 107 to 121 m
12:00	13:00	1.00	POOH to 86 m
13:00	15:00	2.00	Circulate and condition mud
15:00	19:00	4.00	RIH feam to 110 m,
19:00	20:00	1.00	POOH to 86 m
20:00	20:30	0.50	Work on mud pump
20:30	22:00	1.50	Ream from 110 to 181 m
22:00	22:45	0.75	Circulate hole clean
22:45	0:00	1.25	POOH to 86 m

24 HOUR Forecast :		
Build volume and condition hole.		

DAILY DRILLING REPORT

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DAILY DRILLING REPORT

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DAILY DRILLING REPORT

Red Brook # 1							REPORT #: 17		DATE: December 14, 2006	
DEPTH 24:00:		186.5 m		PROGRESS:			Last 24 Hr Rotating Time:		Ave ROP:	
OPER 09:00: Pressure Test BOPs							FOREMAN:		MOBILE NO.: 709-689-9673	
DAILY COST:		HOLE CND.: Good					WEATHER: Clear		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			
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						Pt/Mf				
Cum Hrs						MBT				
						Ca (ppm)				
						Mud Co.				
						Mud Man				
						Mud Up @				
BOTTOMHOLE ASSEMBLY						VOLUMES M ³				
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		Water added		Mud Daily Cost		
Drill w/ fluid		Logging		Fishing		Losses		Mud Cum Cost		
Drill w/ air		Run Casing		WO Materials		WELL CONTROL		SOLIDS CONTROL		
Reaming		Cementing	1 1/2	WO Services	4 1/2	RSPP		Shaker Make		FSI
Rm Rathole		WOC	9 1/2	Safety Meeting		ST/Min		Shaker Mesh		180
Cond / Circ		NU BOP's	1 1/2	Mix mud		MACP(kPa)		Vol UF (l/min)		
Tripping		Test BOPs		Install Wellhead	7	Calc Hole Fill		U.F. (kg/m3)		
Lubricate Rig		Drill Out Cmt		Total Hrs	24	Act Hole Fill		O.F. (kg/m3)		
Repair Rig		DST				Lst BOP Drill:		Hours/Days		
Fishing		Hndle Tools				Calc Hole Fill		Boiler Hrs:		(to 24:00)
						Act Hole Fill				
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:		Ave ROP:	
OPER 09:00: RIH With tricone bit				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		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 (%)		MUD & CHEMICALS	
Pulled For?						Solids (%)		Mud Cycle	77 min
Meters						Oil (%)		Bottoms Up	min
m/hr						Pf/Mf		Tanks	30 m3
Cum Hrs						MBT		Hole Volume	m3
						Cl (ppm)		System Vol.	30 m3
						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
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
Repair Rig	3	DST		
Fishing		Hndle Tools		Total Hrs 24

DRILLING FLUID		VOLUMES M ³	
Water added			
Losses			
WELL CONTROL		SOLIDS CONTROL	
RSPP		Shaker Make	FSI
ST/Min		Shaker Mesh	180
MACP(kPa)		Vol UF (l/min)	Desilter Centrifuge
Calc Hole Fill		U.F. (kg/m3)	
Act Hole Fill		O.F. (kg/m3)	
Lst BOP Drill:	01-Dec-15	Hours/Days	
Calc Hole Fill		Boiler Hrs:	(to 24:00)

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 :			

DAILY DRILLING REPORT

24 HOUR Forecast :

DAILY DRILLING REPORT

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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			
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 (%)		MUD & CHEMICALS	
Pulled For?						Solids (%)		Mud Cycle	77 min
Meters						Oil (%)		Bottoms Up	min
m/hr						Pt/Mf		Tanks	30 m3
Cum Hrs						MBT		Hole Volume	m3
						Cl (ppm)		System Vol.	30 m3
						Ca (ppm)		Mud & Chemicals Added:	
								6sx of federal supreme	
						Mud Co.			
						Mud Man			
						Mud Up @			
BHA Length:	Hook Load:		DP size		4.5"	VOLUMES M ³			
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						Water added		Mud Daily Cost	
RU / TO		Survey		Move Rig		Losses		Mud Cum Cost	
Drill w/ fluid		Logging		Fishing		WELL CONTROL		SOLIDS CONTROL	
Drill w/ air		Run Casing		WO Materials		RSPP		Shaker Make	FSI
Reaming		Cementing	1	WO Services	2	ST/Min		Shaker Mesh	180
Rm Rathole		WOC	16	Safety Meeting		MACP(kPa)			
Cond / Circ		NU BOP's		Mix mud		Calc Hole Fill		Vol UF (l/min)	Desilter Centrifuge
Tripping	5	Test BOPs		Install Wellhead		Act Hole Fill	01-Dec-15	U.F. (kg/m3)	
Lubricate Rig		Drill Out Cmt				Lst BOP Drill:		O.F. (kg/m3)	
Repair Rig		DST		Total Hrs	24	Calc Hole Fill		Hours/Days	
Fishing		Hndle Tools				Act Hole Fill		Boiler Hrs:	(to 24:00)
24 HOUR SUMMARY FOR THE DATE : December 17, 2006 (0000 hrs - 2400 hrs)									
From	To	Duration	Event						
0:00	7:30	7.50	Wait on cement						
7:30	8:30	1.00	RIH to 175 m. Felt plug						
8:30	9:30	1.00	POOH						
9:30	11:00	1.50	RIH open ended to 175 m. and prepare to pump 2 nd cement plug.						
11:00	13:00	2.00	Wait on cement delivery						
13:00	14:00	1.00	Pump .85 m3 class a cement 15.8 ppg. Displace with .75 m3 H2o. Full returns during pumping and displacement						
14:00	15:30	1.50	POOH						
15:30	0:00	8.50	Wait on cement.						
24 HOUR Forecast :									
RIH. Feel plug. Pull out and spot surface cement plug									

Vulcan Minerals

DAILY DRILLING REPORT

[illegible]