

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RCVD APR18'07
OIL CONS. DIV.
DIST. 3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

207 APR -5 PM 2:34

1a. Type of Work DRILL	5. Lease Number NMSF-070417	
1b. Type of Well GAS	Unit Reporting Number 6. If Indian, All or Tribe	
2. Operator ConocoPhillips	7. Unit Agreement Name San Juan 28-7 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number #239M	
4. Location of Well Surf: Unit L (NWSW), 1440' FSL & 1120' FWL, BH: Unit K (NESW), 1475' FSL & 2210' FWL, Surf: Latitude 36° 39.4741 N Longitude 107° 36.0858 W BH: Latitude 36° 39.4798 N Longitude 107° 35.8628 W	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) L Sec. 17, T28N, R7W API # 30-039-30243	
14. Distance in Miles from Nearest Town 22 miles/Blanco	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1120'	17. Acres Assigned to Well DK & MV - 320 - (W/2)	
16. Acres in Lease	18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 51' from San Juan 28-7 #12	
19. Proposed Depth (TVD) 7856' (TMD) 8056'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6725' GL	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached	24. Authorized by: Rhonda Rogers (Regulatory Technician) Date 4-5-07	

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report attached

Threatened and Endangered Species Report attached

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any Department or Agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

Example Master Plan Type 3

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

NMOCD

4/19/07

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

State of New Mexico
Energy, Minerals & Natural Resources Department

Submit to Appropriate District Office
State Lease - 4 Copies
2007 APR - 6 Fee Lease - 3 Copies

1230 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED AMENDED REPORT

RECEIVED

10 AMENDED REPORT

10

$$\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

[Signature]

akota

100

1

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the Division.

Signature

Tracey N. Monroe

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: _____

Significance and Value of Environmental Research

Port Name Number

15703

State of New Mexico

Energy, Minerals and Natural Resources

Form C-103

May 27, 2004

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.

30-039-

30243

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil & Gas Lease No.

Federal Lease SF-078417

7. Lease Name or Unit Agreement Name

San Juan 28-7 Unit

8. Well Number

#239M

9. OGRID Number

217817

10. Pool name or Wildcat

Blanco Mesaverde / Basin Dakota

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH
PROPOSALS.)

1. Type of Well:

Oil Well ☐Gas Well ☒

Other

2. Name of Operator

ConocoPhillips Company

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter L : 1440' feet from the South line and 1120' feet from the West line
Section 17 Township 28N Rng 7W NMPM County Rio Arriba

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

6725' GL

Pit or Below-grade Tank Application

☐ or Closure ☐

Pit type

New Drill

Depth to Groundwater

>100'

Distance from nearest fresh water well

>1000'

Distance from nearest surface water

>1000'

Pit Liner Thickness:

12

mil

Below-Grade Tank:

Volume

4400

bbls;

Construction Material

Synthetic

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐TEMPORARILY ABANDON ☐PULL OR ALTER CASING ☐PLUG AND ABANDON ☐CHANGE PLANS ☐MULTIPLE COMPL ☐

OTHER:

New Drill ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐COMMENCE DRILLING OPNS. ☐CASING/CEMENT JOB ☐ALTERING CASING ☐P AND A ☐OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

New Drill - Lined: ConocoPhillips proposes to construct a new drilling pit, an associated vent/flare pit and a pre-set mud pit (if required). Based on ConocoPhillips' interpretation of the Ecosphere's risk ranking criteria, the new drilling pit and pre-set mud pit will be lined pits as detailed in ConocoPhillips' General Plan dated June 2005 on file at the NMOCD office. A portion of the vent/flare pit will be designed to manage fluids and that portion will be lined as per the risk ranking criteria. ConocoPhillips anticipates closing these pits according to the November 1, 2004 Guidelines.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE

Patsy Clugston

TITLE

Regulatory Specialist

DATE

11/10/2006

Type or print name

Patsy Clugston

E-mail address:

clugspl@conocophillips.co

Telephone No.

505-326-9518

For State Use Only

APPROVED BY

[Signature]

TITLE

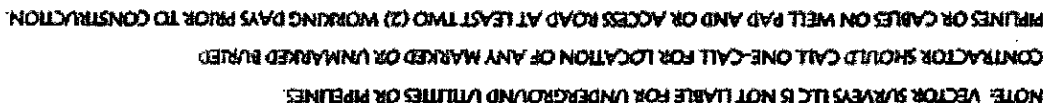
DEPUTY OIL & GAS INSPECTOR, DIST. 4

DATE

APR 19 2007

Conditions of Approval (if any):

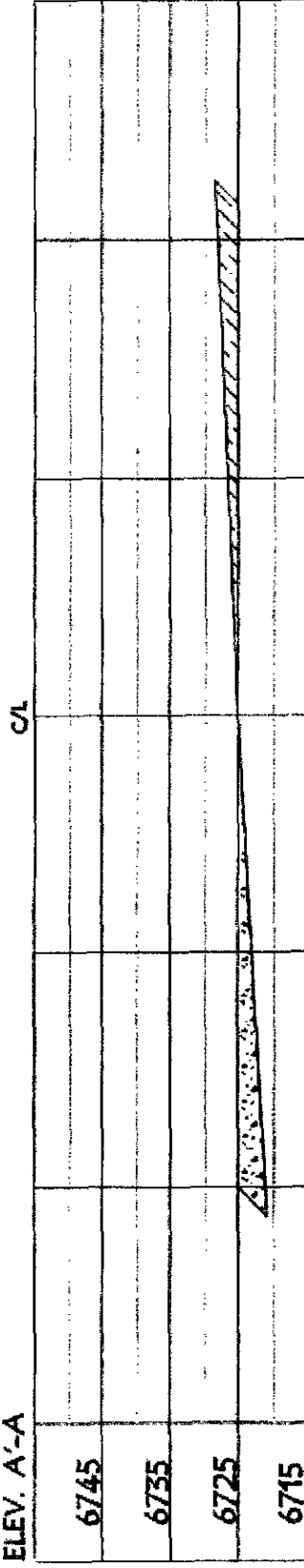
SAN JUAN 28-7 UNIT 239M, 1440' FSL & 1120' FWL
SECTION 17, T-28-N, R-7-W, NMPM, RIO ARriba COUNTY, NM
GROUND ELEVATION: 6725', DATE: SEPTEMBER 21, 2006



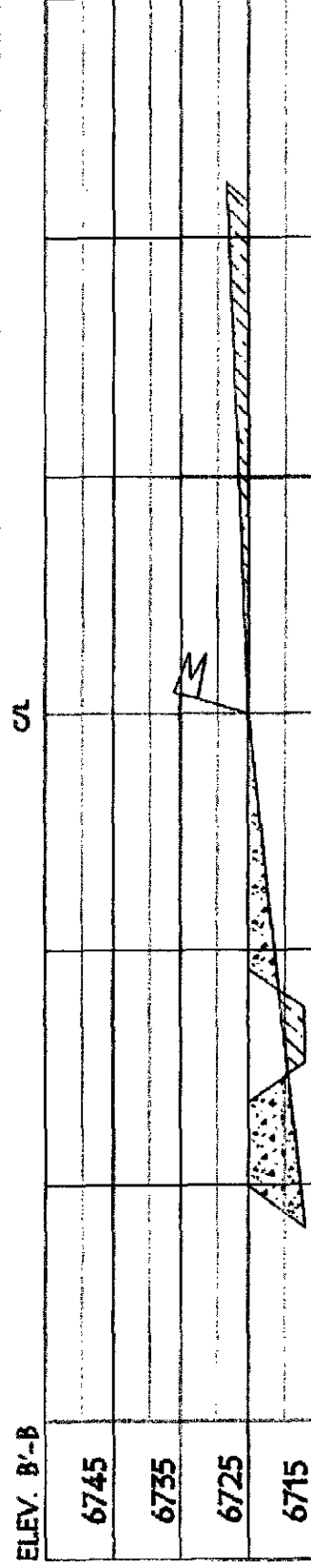
CONOCOPHILLIPS COMPANY

SAN JUAN 28-7 UNIT 239M, 1440' FSL & 1120' FWL
SECTION 17, T-28- N, R-7-W, NMPM, RIO ARriba COUNTY, NM
GROUND ELEVATION: 6725', DATE: SEPTEMBER 21, 2006

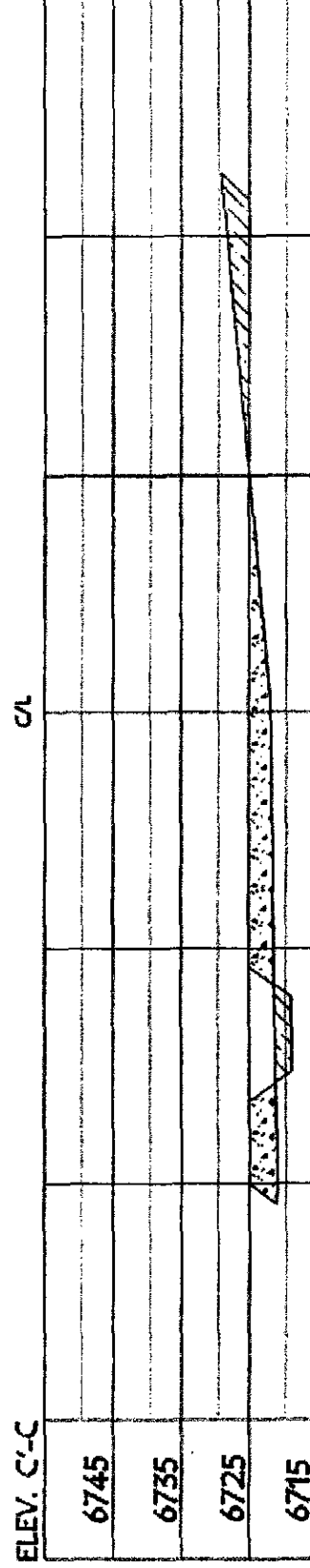
ELEV. A'-A



ELEV. B'-B



ELEV. C'-C



NOTE: VECTOR SURVEYS LLC IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.
CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED
PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

SJ 28-7 #239M OPERATIONS PLAN

Well Name: SJ 28-7 #239M

Objective: Mesa Verde/Dakota

Location: Rio Arriba NM

Elevation: 6725'

Surface Coordinates/Footages

T - 28 N R - 7 W Sec.: 17
 1440' FSL 1120' FWL
 Latitude: 36° 39.4741' N
 Longitude: 107° 36.0858' W

Bottom Hole Coordinates/Footages

T - 28 N R - 7 W Sec.: 17
 1475' FSL 2210' FWL
 Latitude: 36° 39.4798' N
 Longitude: 107° 35.8628' W

<u>Formation</u>	<u>Top (TMD)</u>	<u>Top (TVD)</u>	<u>Contents</u>
Nacimiento	1192'	1166'	
Ojo Alamo	2471'	2344'	aquifer
Kirtland	2722'	2575'	
Fruitland	3306'	3116'	gas
Pictured Cliffs	3571'	3372'	
Lewis	3706'	3506'	
Chacra	4518'	4318'	
Cliff House	5295'	5095'	gas
Menefee	5338'	5138'	gas
Massive Point Lookout	5777'	5577'	gas
Mancos	6046'	5846'	
Gallup	6856'	6656'	gas
Greenhorn	7726'	7526'	gas
Graneros	7788'	7588'	
Two Wells	7832'	7632'	gas
Paguate	7931'	7731'	gas
Cubero	7963'	7763'	gas
Lower Cubero	7993'	7793'	
Total Depth:	8056'	7856'	gas

Logging Program: Cased Hole: CBL-GR
 Open Hole: None

<u>Mud Program:</u>	<u>Interval (TMD)</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Vis. (s/qt)</u>	<u>Fluid Loss (cc/30min)</u>
	0' - 216'	Spud	8.4-9.0	40-50	No control
	216' - 3906'	Non-dispersed	8.4-9.0	30-60	Less than 8
	3906' - 8056'	Air/Air Mist/Nitrogen	n/a	n/a	n/a

<u>Casing program:</u>	<u>Interval (TMD)</u>	<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight</u>	<u>Grade</u>
	0' - 216'	12 1/4"	9 5/8"	32.3#	H-40
	216' - 3906'	8 3/4"	7"	23.0#	L-80
	3906' - 8056'	6 1/4"	4 1/2"	11.6#	L-80

<u>Tubing program:</u>	<u>Interval (TMD)</u>	<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight</u>	<u>Grade</u>
	0' - 8056'	Cased	2 3/8"	4.7#	J-55

Wellhead Equipment

9 5/8" x 7" X 4 1/2" x 2 3/8" – 11" (2000 psi) wellhead assembly

Drilling: Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

Surface

Drill to surface casing point of 216' and set 9.625" casing.

Intermediate

Mud drill to kick off point of 350'. At this point the well will be directionally drilled by building 3 degrees per 100' with an azimuth of 88.16 degrees. The end of the build will be at a TVD of 1093', a TMD of 1131', a reach of 150', and an inclination of 22.89 degrees. This angle and azimuth will be held to a TVD of 2963', a TMD of 3143', and a reach of 940'. At this point the well will be drilled with a drop of 3 degrees per 100'. The end of the drop will be at a TVD of 3706', a TMD of 3906', a reach of 1091', and an angle of 0.0 degrees. 7" casing will be set at this point.

Production

From the shoe of the intermediate string, the well will be drilled vertically with an air hammer to a TVD of 7856' (TMD of 8056'). 4.5" casing will be set at this point.

Cementing

9.625" surface casing conventionally drilled: **200%** excess cement to bring cement to surface.

Run 203 cu.ft. (159 sks) Type III cement with 3% CaCl₂ and 1/4 pps celloflake (1.28 sks/ cu.ft.). Wait on cement appropriate time until cement achieves 250 psi compressive strength at 60° F prior to nipple up of BOPE. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.

7" intermediate casing: **50%** excess cement to bring cement to surface.

Lead with 757 cu.ft. (355 sks) Premium Lite w/ 3% CaCl₂, 0.25 pps Cello-Flake, 5 pps LCM-1, 0.4% FL-52 and 0.4% SMS (2.13 sks/ft³). Tail with 124 ft³ (90 sks) Type III cmt. w/ 1% CaCl₂, 0.25 pps Cello-Flake and 0.2% FL-52 (1.38 sks/ft³). If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC.

4.5" production casing: **30%** excess cement to achieve 100' overlap with intermediate casing.

Run 565 cu.ft. (285 sks) Premium Lite HS FM + 0.25pps Cello-Flake, 0.3% CD-32, 6.25pps LCM-1, 1% FL-52 (1.98 sks/ft³).

BOP and Tests

Surface to Total Depth – 11", 2000 psi double gate BOP stack (Reference Figure #1).

Surface to Total Depth – choke manifold (Reference Figure #2).

Prior to drilling out surface casing, test BOPE and casing to 600 psi for 30 minutes.

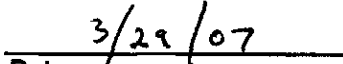
Pipe rams will be actuated at least once each day and blind rams will be actuated once each trip to test proper functioning. A Kelly cock valve and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

BOPE tests will be performed using an appropriately sized test plug and test pump and will be recorded using calibrated test gauges and a properly calibrated strip or chart recorder. The test will be recorded in the driller's log and will include a low pressure test requirement of 250 psig held for five minutes and a high pressure test requirement held for ten minutes as described in Onshore Order No. 2 or otherwise noted in the APD. A successful BOPE test using a test plug is considered when no pressure drop occurs over the duration of the test. Test gauges and recorders must be of the proper range and resolution commensurate with the authorized test pressure. Where the intermediate casing strings are used, only one BOPE test will be necessary contingent upon the test being conducted to the highest approved test pressure to which BOPE will be exposed. Casing pressure tests must be held for 30 minutes with no more than 10 percent pressure drop during the duration of the test.

Additional Information:

- No gas dedication.
- New casing will be utilized.
- Pipe movement (reciprocation) will be done if hole conditions permit.
- No abnormal pressure zones are expected.
- BHP is expected to be 2000 psi.


Drilling Engineer


Date

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 UNIT 239M

DEVELOPMENT

Lease:		AFE #: WAN.CNV.7173		AFE \$:	
Field Name: 28-7		Rig: Aztec Rig 730	State: NM	County: RIO ARRIBA	API #:
Geologist:		Phone:	Geophysicist:		Phone:
Geoscientist: Glaser, Terry J		Phone: (832)486-2332	Prod. Engineer: Fontenot, Jessie C		Phone: +1 832-486-3483
Res. Engineer: Johnson, Tom B.		Phone: (832)-486-2347	Proj. Field Lead: Fransen, Eric E.		Phone:

Primary Objective (Zones):

Zone	Zone Name
R20002	MESAVERDE(R20002)
R20076	DAKOTA(R20076)

Location: Surface		Datum Code: NAD 27		Deviated	
Latitude: 36.657903	Longitude: -107.601430	X:	Y:	Section: 17	Range: 007W
Footage X: 1120 FWL	Footage Y: 1440 FSL	Elevation: 6725	(FT)	Township: 028N	
Tolerance:					
Location: Bottom Hole		Datum Code: NAD 27		Deviated	
Latitude: 36.657997	Longitude: -107.597713	X:	Y:	Section: 17	Range: 007W
Footage X: 2210 FWL	Footage Y: 1475 FSL	Elevation:	(FT)	Township: 028N	
Tolerance:					

Location Type: Year Round	Start Date (Est.):	Completion Date:	Date In Operation:
Formation Data: Assume KB = 6741 Units = FT			

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	213	6528	☐			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1166	5575	☐			
OJAM	2344	4397	☐			Possible water flows.
KRLD	2575	4166	☐			
FRLD	3116	3625	☐			Possible gas.
PCCF	3372	3369	☐			
LEWS	3506	3235	☐			
Intermediate Casing	3606	3135	☐			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4318	2423	☐			
UCLFH	4987	1754	☐			
CLFH	5095	1646	☐			Gas; possibly wet
MENF	5138	1603	☐			Gas.
PTLK	5577	1164	☐			Gas.
MNCS	5846	895	☐			
UPPER GLLP	6656	85	☐			Gas. Possibly wet.
GRHN	7526	-785	☐			Gas possible, highly fractured
GRRS	7588	-847	☐			
TWLS	7632	-891	☐			Gas
PAGU	7731	-990	☐			Gas. Highly Fractured.
CBBO	7763	-1022	☐			Gas
CBRL	7793	-1052	☐			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 UNIT 239M

DEVELOPMENT

Total Depth	7856	-1115	☐	4 1/2", 10.5 ppf, J-55, STC casing. Circulate cement a minimum of 100' inside the previous casing string. No open hole logs. Cased hole TDT with GR to surface.
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Reference Wells:		
Reference Type	Well Name	Comments
Intermediate	SJ 28-7 242	18-32N-7W-NW, KB = 6865
Intermediate	SJ 28-7 22A	17-28N-7W-SE, KB = 6649
Intermediate	SJ 28-7 8A	18-28N-7W-SE, KB = 6889

Logging Program:			
Intermediate Logs:	☐ Log only if show	☐ GR/ILD	☐ Triple Combo

TD Logs:	☐ Triple Combo	☐ Dipmeter	☐ RFT	☐ Sonic	☐ VSP	☐ TDT	☒ Other
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CBL/GR

Additional Information:					
Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks

Comments: Location/Tops/Logging - TD is 330' below GRHN

General/Work Description - NO LEWIS. Make sure cost reflect Directional well. 80/80 Kd/Kmv