STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

CONFIDENTIAL

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: FEE
6. SURFACE: Fee

1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐

7. IF INDIAN, ALLOTTEE OR TRIBE NAME:

B. TYPE OF WELL: OIL ☑ GAS ☐ OTHER _____ SINGLE ZONE ☑ MULTIPLE ZONE ☐

8. UNIT or CA AGREEMENT NAME: N/A

2. NAME OF OPERATOR: PETROGLYPH OPERATING, CO. INC.

9. WELL NAME and NUMBER: Fee 28-09D4

3. ADDRESS OF OPERATOR: P.O. BOX 607 CITY ROOSEVELT STATE UT ZIP 84066
PHONE NUMBER: (435) 722-2531

10. FIELD AND POOL, OR WILDCAT: Duchesne Field GD

4. LOCATION OF WELL (FOOTAGES)
556749 X 4439366 Y 40.104573 -110.334185
AT SURFACE: 2500' FSL, 600' FEL at surface. 470' FSL, 2000' FEL at end of horizontal leg SWSE
556325 X 4438735 Y 40.098913 -110.339207
AT PROPOSED PRODUCING ZONE:

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 28 4S 4W U

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 9.7 miles Southeast of Duchesne, UT

12. COUNTY: Duchesne
13. STATE: UTAH

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 470'
16. NUMBER OF ACRES IN LEASE:
17. NUMBER OF ACRES ASSIGNED TO THIS WELL:

18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): 2000'
19. PROPOSED DEPTH: 6,214
20. BOND DESCRIPTION: BO 4556

21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 6046.9 feet graded ground
22. APPROXIMATE DATE WORK WILL START: 11/9/2009
23. ESTIMATED DURATION: 30 days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
18"	14"	COND	Steel	40	See attached 8-Point
12 1/4	9 5/8"	J-55	36.0	480	
8 3/4	7"	L-80	26.0	6,500	

CONFIDENTIAL

DJD BHC DWA 11/18

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
☐ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
☑ COMPLETE DRILLING PLAN
☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Ed Trotter TITLE Agent

SIGNATURE Ed Trotter DATE 10/22/2009

(This space for State use only)

API NUMBER ASSIGNED: 43-013-34293

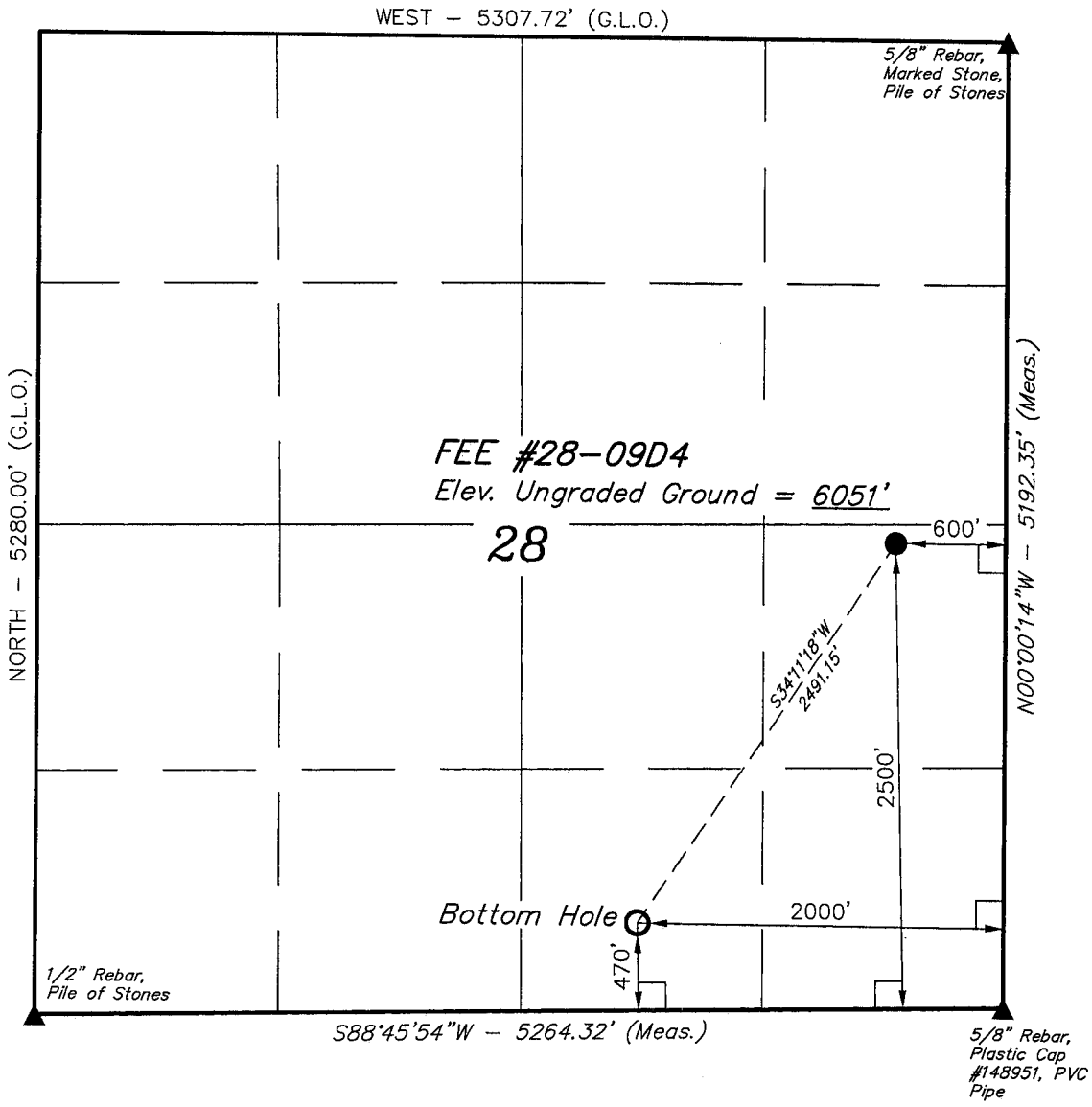
APPROVAL:

RECEIVED
OCT 26 2009
DIV. OF OIL, GAS & MINING

(11/2001)

(See Instructions on Reverse Side)

T4S, R4W, U.S.B.&M.

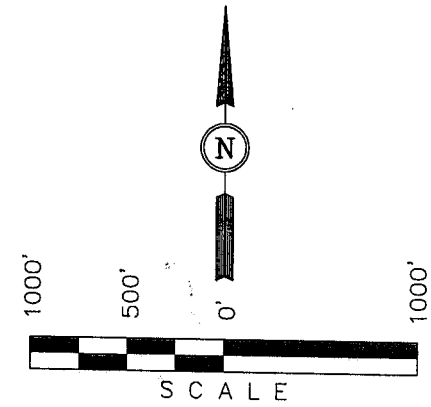


PETROGLYPH OPERATING CO., INC.

Well location, FEE #28-09D4, located as shown in the NE 1/4 SE 1/4 of Section 28, T4S, R4W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED ON CAP AS BEING 6097 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°05'55.96" (40.098878)	LATITUDE = 40°06'16.32" (40.104533)
LONGITUDE = 110°20'23.58" (110.339883)	LONGITUDE = 110°20'05.56" (110.334878)
NAD 27 (TARGET BOTTOM HOLE)	**NAD 27 (SURFACE LOCATION)**
LATITUDE = 40°05'56.10" (40.098917)	LATITUDE = 40°06'16.46" (40.104572)
LONGITUDE = 110°20'21.02" (110.3398172)	LONGITUDE = 110°20'03.00" (110.334167)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 08-31-09	DATE DRAWN: 09-01-09
PARTY D.K. D.M. K.G.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE PETROGLYPH OPERATING CO., INC.	

Petroglyph Operating Co., Inc.
P.O. Box 607
Roosevelt, UT 84066

October 22, 2009

Utah Division of Oil, Gas, & Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, UT 84114-5801

RE: APPLICATION FOR PERMIT TO DRILL
FEE 28-09D4
NE/SE, SECTION 28, T4S, R4W
DUCHESNE COUNTY, UTAH
FEE LANDS

Enclosed please find the original and one copy of the Application for Permit to Drill and associated attachments for the referenced well.

Please address further communication regarding this matter (including approval) to:
Ed Trotter
P.O. Box 1910
Vernal, UT 84078
Phone: (435)789-4120
Fax: (435)789-1420

Sincerely,

Ed Trotter
Agent
Petroglyph Operating Co., Inc.

Attachments

RECEIVED
OCT 26 2009
DIV. OF OIL, GAS & MINING

POCI

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/26/2009

API NO. ASSIGNED: 43-013-34293

WELL NAME: FEE 28-09D4

OPERATOR: PETROGLYPH OPERATING CO (N3800)

PHONE NUMBER: 435-722-2531

CONTACT: ED TROTTER

PROPOSED LOCATION:

NESE 28 040S 040W

SURFACE: 2500 FSL 0600 FEL

BOTTOM: 0707 FSL 2292 FEL

COUNTY: DUCHESNE

LATITUDE: 40.10457 LONGITUDE: -110.33419

UTM SURF EASTINGS: 556749 NORTHINGS: 4439366

FIELD NAME: DUCHESNE (90)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKD	2/1/10
Geology		
Surface		

LEASE TYPE: 4 - Fee

LEASE NUMBER: FEE

SURFACE OWNER: 4 - Fee

PROPOSED FORMATION: CSLPK

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. LPM4138153)

N Potash (Y/N)

N Oil Shale 190-5 (B) or 190-3 or 190-13

✓ Water Permit
(No. 43-8342)

N RDCC Review (Y/N)
(Date:)

Y Fee Surf Agreement (Y/N)

NA Intent to Commingle (Y/N)

LOCATION AND SITING:

____ R649-2-3. * Horizontal

Unit:

____ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells

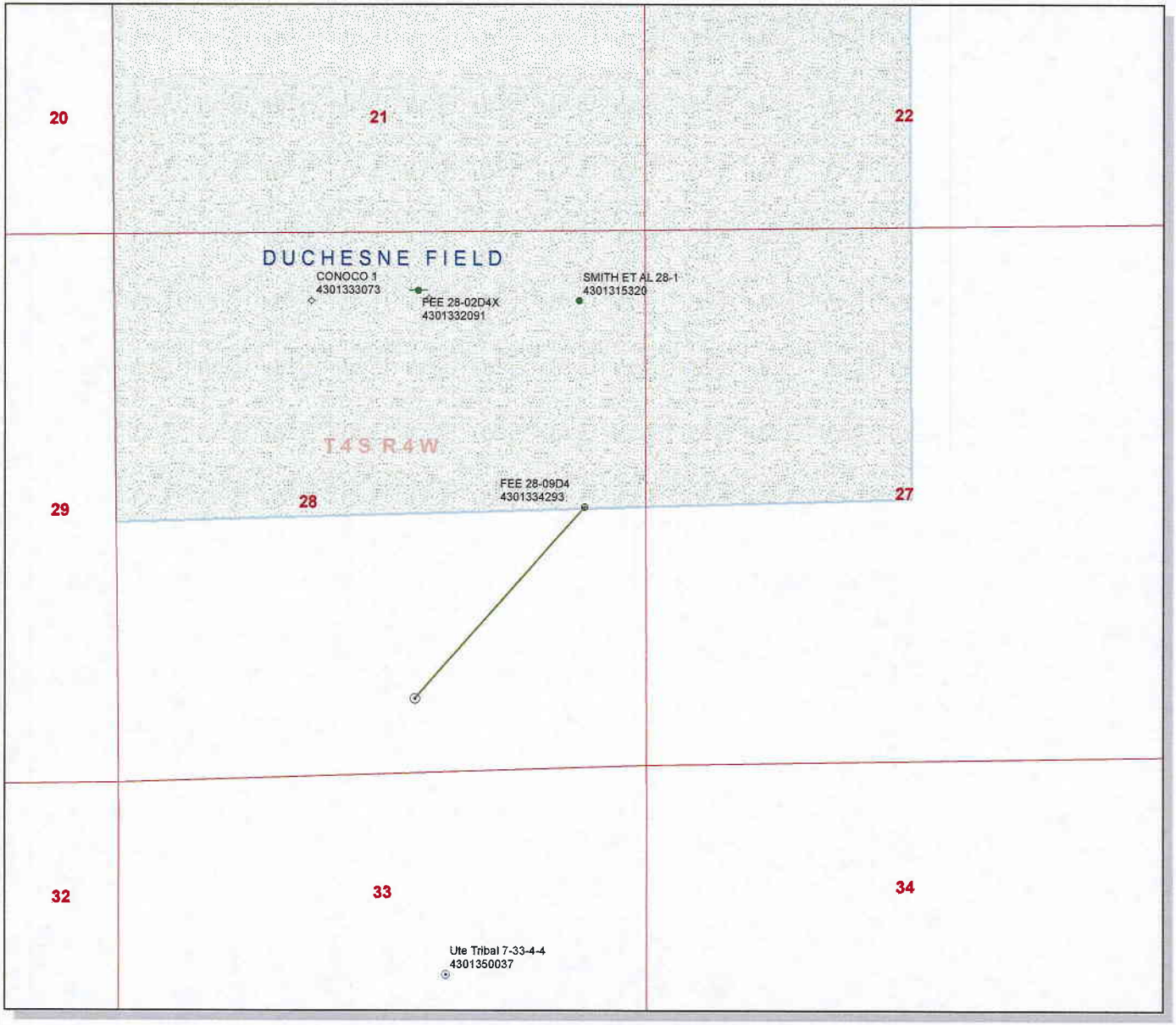
____ R649-3-3. Exception

____ Drilling Unit
Board Cause No:
Eff Date:
Siting:

____ R649-3-11. Directional Drill

COMMENTS: Needs Presite (12-01-09)
~~Temp 640' Acre Spacing~~

STIPULATIONS: 1- Spacing Stip
2- STATEMENT OF BASIS
3- Cement Stip #3 (7" production, back to Surface)



API Number: 4301334293

Well Name: FEE 28-09D4

Township 04.0 S Range 04.0 W Section 28

Meridian: UBM

Operator: PETROGLYPH OPERATING CO

Map Prepared:
Map Produced by Diana Mason

Units
STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields
STATUS
- Unknown
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- STORAGE
- TERMINATED
- Sections
- Township

Wells Query
- <all other values>

Status
- APD - Aproved Permit
- DRL - Spuded (Drilling Commenced)
- GIW - Gas Injection
- GS - Gas Storage
- LA - Location Abandoned
- LOC - New Location
- OPS - Operation Suspended
- PA - Plugged Abandoned
- PGW - Producing Gas Well
- POW - Producing Oil Well
- RET - Returned APD
- SGW - Shut-in Gas Well
- SOW - Shut-in Oil Well
- TA - Temp. Abandoned
- TW - Test Well
- WDW - Water Disposal
- WIW - Water Injection Well
- WSW - Water Supply Well

1,250 625 0 1,250 Feet

1:12,000

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
2169	43-013-34293-00-00		OW	P	No

Operator	PETROGLYPH OPERATING CO	**Surface Owner-APD**	
Well Name	FEE 28-09D4	**Unit**	
Field	DUCHESNE	**Type of Work**	
Location	NESE 28 4S 4W U 2500 FSL 600 FEL	GPS Coord (UTM) 556749E 4439366N	

Geologic Statement of Basis

Petroglyph proposes to set 480' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 500'. A search of Division of Water Rights records shows 3 water wells within a 10,000 foot radius of the proposed location. The wells all produce from a depth around 400 feet. None of these wells is within one mile of the proposed location. The surface formation at this site is the Green River Formation. This area may be a recharge area for beds in the upper Green River Formation. The Green River Formation is made up of interbedded limestones, shales and sandstones and can be a significant source of ground water. The proposed casing and cement should adequately protect useable ground water in this area.

Brad Hill	12/1/2009
APD Evaluator	**Date / Time**

Surface Statement of Basis

The proposed location is approximately 6 air miles and 9.5 road miles southeast of Duchesne, Utah. The general area is Cottonwood Ridge with Cottonwood Wash about 1/2 mile to the west. This wash is ephemeral and joins the Duchesne River about 6 miles to the north. No streams, seeps or springs are known to exist in the area. Broad flats or undulating terrain surrounded by gentle hills dominate the area. The flats are sometimes intersected by drainages with gentle to moderate side slopes. Access is by State and County roads to within 0.2 miles, which will require new construction.

The proposed pad for the FEE 28-09S4 oil well is laid out longitudinally along the northeast edge of a long gentle slope that continues to the south. On the north edge of the pad the topography steepens and breaks off to the northeast. Several small draws and knolls occur here. Location Corner 8 is planned to be rounded to reduce the fill needed in this corner. An existing small drainage runs northerly away from the reserve pit area. It misses Location Corner 6. After the pit is closed, a ditch may be desirable along the west side connecting to this natural drainage. The site should be a suitable location to construct a pad, drill and operate a well. The well will be directional drilled with the bottom hole location 2491 feet to the southwest under steeper terrain.

Mr. Douglas Barton of Eden, Utah owns the surface. A signed surface use agreement exists. The Lot is part of a sub-division called the Silvermoon Estates. Only a limited amount of development appears to have occurred within the entire subdivision. Mr. Barton was contacted by telephone and invited to attend the pre-site visit. He planned to attend but called and said he would not be able to attend. The minerals are FEE owned by another party.

Floyd Bartlett	12/1/2009
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 12 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator PETROGLYPH OPERATING CO
Well Name FEE 28-09D4
API Number 43-013-34293-0 **APD No** 2169 **Field/Unit** DUCHESNE
Location: 1/4,1/4 NESE **Sec** 28 **Tw** 4S **Rng** 4W 2500 FSL 600 FEL
GPS Coord (UTM) 556748 4439368 **Surface Owner**

Participants

Floyd Bartlett (DOGM), Ed Trotter (Permitting Agent for Petroglyph Operating. Co. INC.), Jason Bywater (District Supervisor Petroglyph)

Regional/Local Setting & Topography

The proposed location is approximately 6 air miles and 9.5 road miles southeast of Duchesne, Utah. The general area is Cottonwood Ridge with Cottonwood Wash about 1/2 mile to the west. This wash is ephemeral and joins the Duchesne River about 6 miles to the north. No streams, seeps or springs are known to exist in the area. Broad flats or undulating terrain surrounded by gentle hills dominate the area. The flats are sometimes intersected by drainages with gentle to moderate side slopes. Access is by State and County roads to within 0.2 miles, which will require new construction.

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Surface Use Plan

Current Surface Use

Recreational
Wildlfe Habitat
Residential
Deer Winter Range

New Road

Miles	Well Pad		Src Const Material	Surface Formation
0.2	**Width** 230	**Length** 315	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Vegetation includes scattered juniper, black sagebrush, halogeton, winter fat, shadscale, curly mesquite, Indian ricegrass, stipa and annuals.

Cattle, deer, prairie dogs, small mammals and birds.

.

Soil Type and Characteristics

Moderately deep shaley sandy clay loam

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required Y

An existing small drainage runs northerly away from the reserve pit area. It misses Location Corner 6. After the pit is closed, a ditch may be desirable along the west side connecting to this natural drainage.

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? N **Paleo Potental Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N

Reserve Pit

Site-Specific Factors		**Site Ranking**		
Distance to Groundwater (feet)	100 to 200	5		
Distance to Surface Water (feet)	>1000	0		
Dist. Nearest Municipal Well (ft)	>5280	0		
Distance to Other Wells (feet)	>1320	0		
Native Soil Type	Mod permeability	10		
Fluid Type	Fresh Water	5		
Drill Cuttings	Normal Rock	0		
Annual Precipitation (inches)	<10	0		
Affected Populations	30 to 50	8		
Presence Nearby Utility Conduits	Not Present	0		
	Final Score	28	1	**Sensitivity Level**

Characteristics / Requirements

The reserve pit will be 60' x 110' x 8' deep located in an area of cut on the southeast side of the location. A pit liner is required.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 12 **Pit Underlayment Required?** Y

Other Observations / Comments

Floyd Bartlett	12/1/2009
Evaluator	**Date / Time**

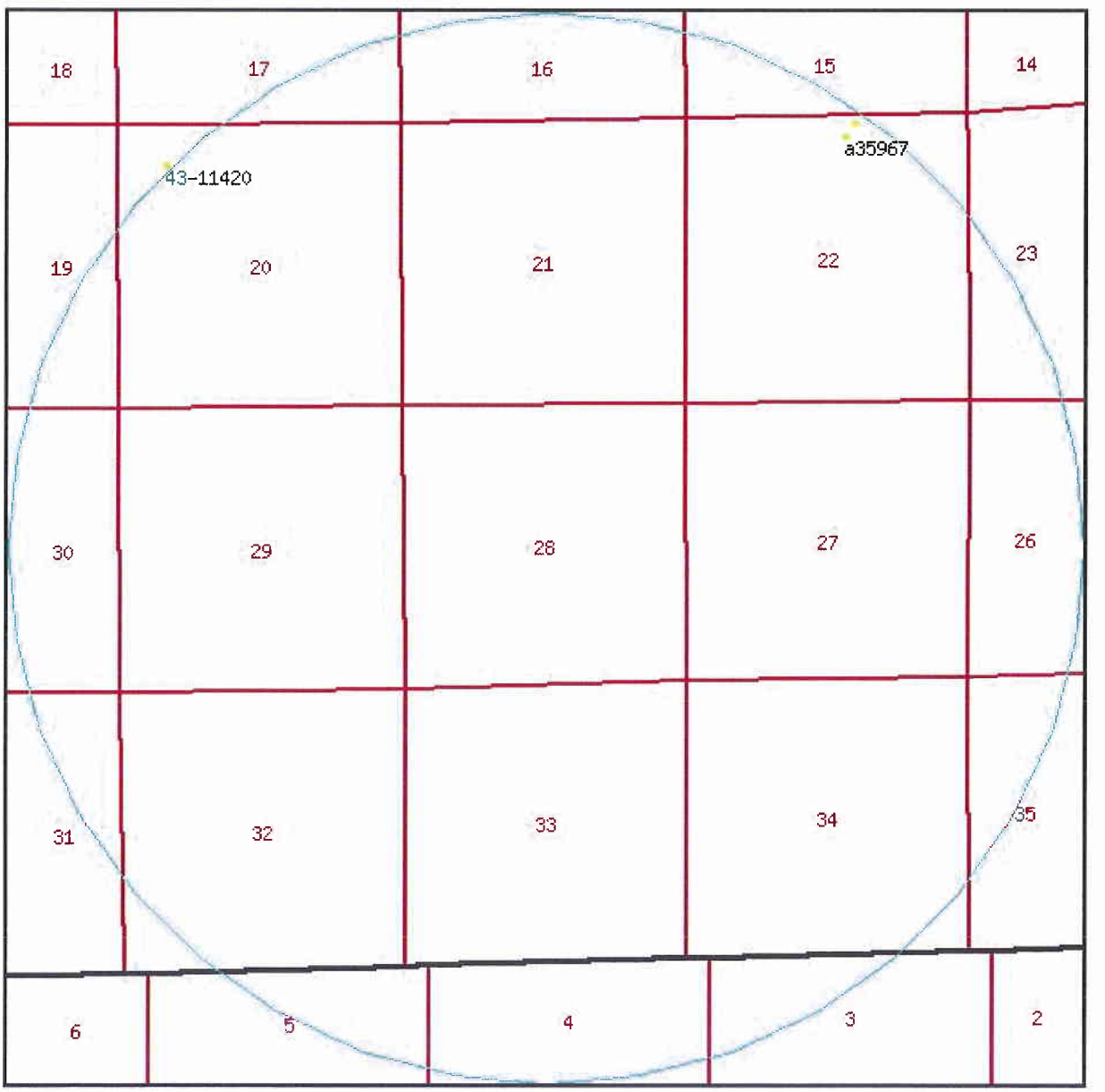
Search all of

Utah Division of Water Rights

Output Listing

Version: 2009.05.06.00 Rundate: 12/01/2009 04:43 PM

Radius search of 10000 feet from a point N2640 E2640 from the SW corner, section 28, Township 4S, Range 4W, US b&m Criteria:wrtypes=W,C,E podtypes=U status=U,A,P usetypes=all



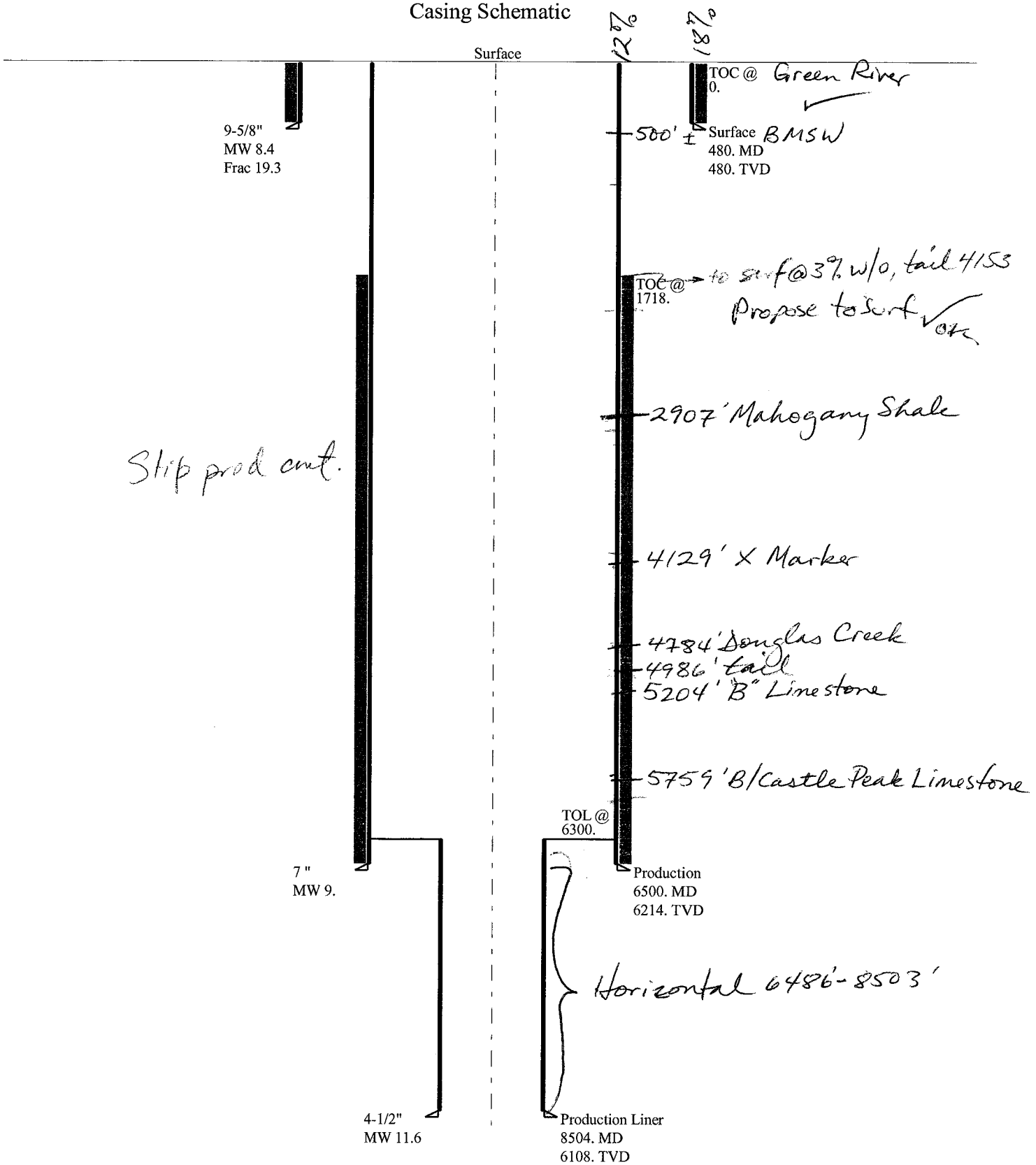
0 1300 2600 3900 5200 ft

Water Rights

WR Number	Diversion Type/Location	Well Log	Status	Priority	Uses	CFS	ACFT	Ov
43-11420	Underground	well info	A	20030401	DI	0.000	1.200	WAYNI
	S750 E910 NE 19 4S 4W US							P. O. BC
43-11761	Underground	well info	A	20060425	DIS	0.000	1.730	RONAL L. REG/
	S200 W2100 NE 22 4S 4W US							9234 CC LANE
43-12276	Underground		U	20091005	S	0.000	1.730	RONAL L. REG/
	S342 E2994 NW 22 4S 4W US							P.O. BO
a35967	Underground		U	20091005	S	0.000	0.957	RONAL L. REG/
	S342 E2994 NW 22 4S 4W US							9234 CC LANE

43013342930000 Fee 28-09D4

Casing Schematic



Well name:	**43013342930000 Fee 28-09D4**
Operator:	**Petroglyph Operating Co. Inc.**
String type:	Production
Project ID:	43-013-34293-0000
Location:	Duchesne County

Design parameters:

Collapse

Mud weight: 9.000 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 1,538 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 2,905 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC:	1.80 (J)
8 Round LTC:	1.80 (J)
Buttress:	1.60 (J)
Premium:	1.50 (J)
Body yield:	1.50 (B)

Tension is based on buoyed weight.

Neutral point: 5,370 ft

Environment:

H2S considered?	No
Surface temperature:	65 °F
Bottom hole temperature:	152 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	368 ft
Cement top:	1,718 ft

Directional Info - Build & Hold

Kick-off point	5737 ft
Departure at shoe:	491 ft
Maximum dogleg:	12.02 °/100ft
Inclination at shoe:	90.04 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	6500	7	26.00	L-80	LT&C	6214	6500	6.151	1396.4

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	2905	5402	1.859	2905	7240	2.49	140	511	3.66 J

Prepared by: Helen Sadik-Macdonald, Div of Oil,Gas & Mining

Phone: 810-538-5357

Date: December 10,2009
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 6214 ft, a mud weight of 9 ppg The casing is considered to be evacuated for collapse purposes.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**43013342930000 Fee 28-09D4**
Operator:	**Petroglyph Operating Co. Inc.**
String type:	Production
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BOPE REVIEW	Petroglyph Fee 28-09D4	API 43-013-34293-0000

INPUT

Well Name	Petroglyph Fee 28-09D4 API 43-013-34293-0000			
	String 1	String 2		
Casing Size (")	9 5/8	7		
Setting Depth (TVD)	2900	6211		
Previous Shoe Setting Depth (TVD)	40	2900		
Max Mud Weight (ppg)	8.4	11.6	✓	
BOPE Proposed (psi)	500	3000		
Casing Internal Yield (psi)	3520	7240		
Operators Max Anticipated Pressure (psi)	2520	7.8 ppg ?		

Calculations	String 1	9 5/8 "		
Max BHP [psi]	.052*Setting Depth*MW =	1267		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	919	NO	air drill w/diverter or rotating head
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	629	NO	Reasonable depth
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	638	NO	
Required Casing/BOPE Test Pressure		2464	psi	
***Max Pressure Allowed @ Previous Casing Shoe =**		40	psi	*Assumes 1psi/ft frac gradient

Calculations	String 2	7 "		
Max BHP [psi]	.052*Setting Depth*MW =	3746		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	3001	NO	
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	2380	YES	O.K.
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	3018	NO	O.K.
Required Casing/BOPE Test Pressure		3000	psi	
***Max Pressure Allowed @ Previous Casing Shoe =**		2900	psi	*Assumes 1psi/ft frac gradient

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

CONFIDENTIAL

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: FEE
6. SURFACE: Fee

1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐

7. IF INDIAN, ALLOTTEE OR TRIBE NAME:

B. TYPE OF WELL: OIL ☑ GAS ☐ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☐

8. UNIT or CA AGREEMENT NAME: N/A

2. NAME OF OPERATOR: PETROGLYPH OPERATING CO., INC.

9. WELL NAME and NUMBER: Fee 28-09D4

3. ADDRESS OF OPERATOR: P.O. BOX 607 CITY ROOSEVELT STATE UT ZIP 84066
PHONE NUMBER: (435) 722-2531

10. FIELD AND POOL, OR WILDCAT: Duchesne Field

4. LOCATION OF WELL (FOOTAGES) 556749X 4439366Y 40.104573 -110.334185
AT SURFACE: 2500' FSL, 600' FEL @ surface. 707' FSL, 2292' FEL at end of horizontal leg
AT PROPOSED PRODUCING ZONE: 556236X 4438804Y 40.099544 -110.340250

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 28 4S 4W U

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 9.7 miles Southeast of Duchesne, UT

12. COUNTY: DUCHESNE
13. STATE: UTAH

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 470'
16. NUMBER OF ACRES IN LEASE:
17. NUMBER OF ACRES ASSIGNED TO THIS WELL:

18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): 2000'
19. PROPOSED DEPTH: 6,214
20. BOND DESCRIPTION: BO 4556

21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 6046.9
22. APPROXIMATE DATE WORK WILL START: 11/20/2009
23. ESTIMATED DURATION: 30 DAYS

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
18"	14"	COND	STEEL	40	See attached 8-point
12 1/4	9 5/8 '	J-55	36.0	480	
8 3/4	7 '	L-80	26.0	6,500	

CONFIDENTIAL

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
☐ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
☑ COMPLETE DRILLING PLAN
☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Ed Trotter TITLE Agent

SIGNATURE Ed Trotter DATE 11/18/2009

(This space for State use only)

API NUMBER ASSIGNED: 43-013-34293

APPROVAL

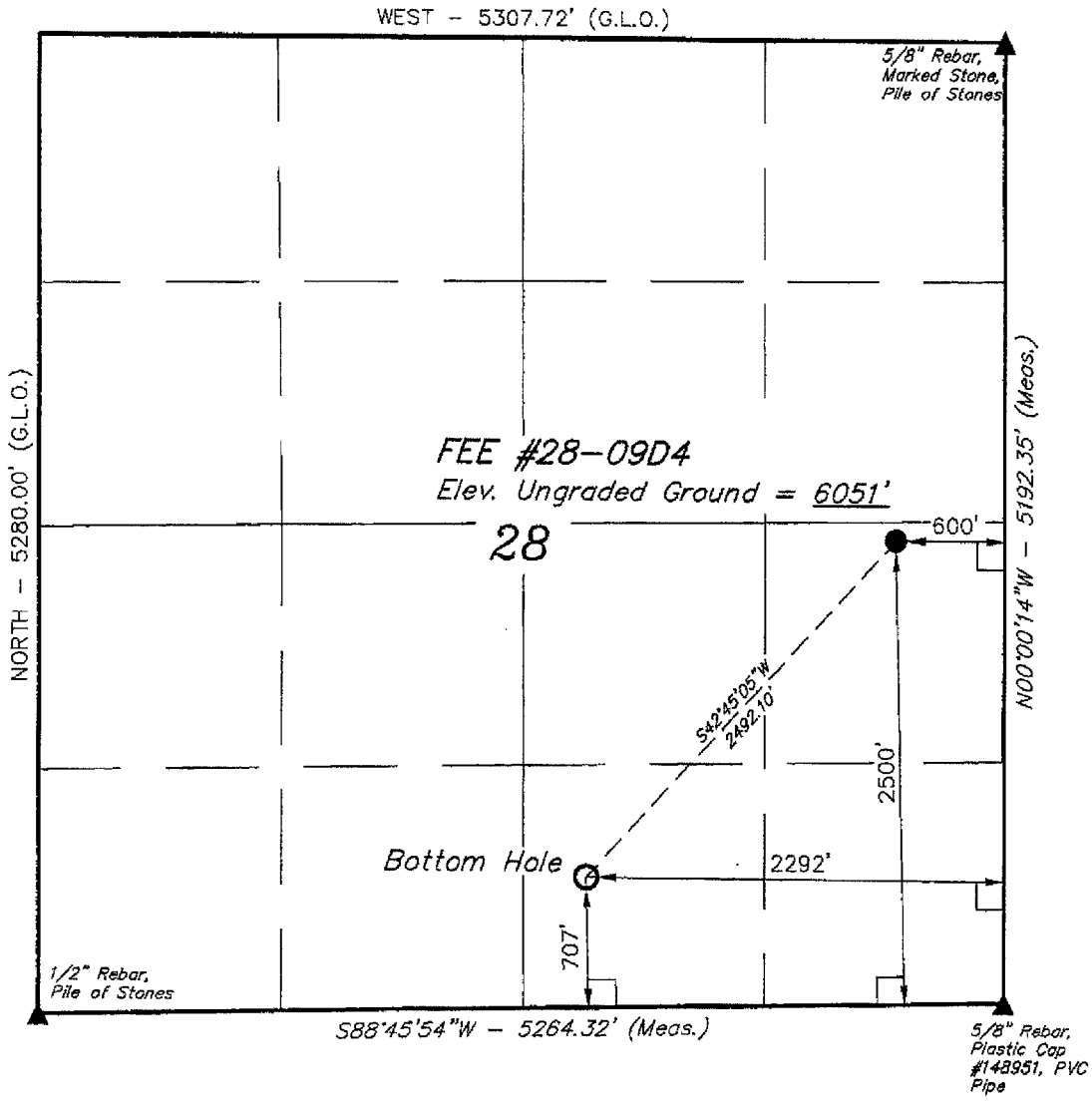
Approved by the
Utah Division of
Oil, Gas and Mining
(See Instructions on Reverse Side)

Date: 02-01-10
By: [signature]

RECEIVED
NOV 18 2009
DIV OF OIL, GAS & MINING

(11/2001)

T4S, R4W, U.S.B.&M.

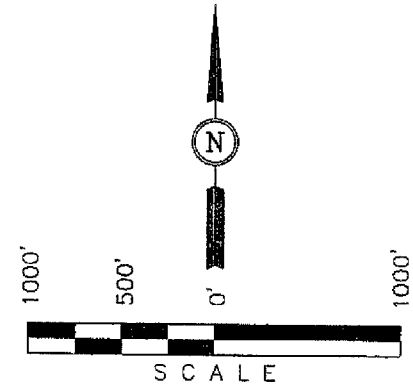


PETROGLYPH OPERATING CO., INC.

Well location, FEE #28-09D4, located as shown in the NE 1/4 SE 1/4 of Section 28, T4S, R4W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED ON CAP AS BEING 6097 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REVISED: 11-10-09 L.K.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°05'58.24" (40.099511)	LATITUDE = 40°06'16.32" (40.104533)
LONGITUDE = 110°20'27.33" (110.340925)	LONGITUDE = 110°20'05.56" (110.334878)
NAD 27 (TARGET BOTTOM HOLE)	**NAD 27 (SURFACE LOCATION)**
LATITUDE = 40°05'58.38" (40.099550)	LATITUDE = 40°06'16.46" (40.104572)
LONGITUDE = 110°20'24.77" (110.340214)	LONGITUDE = 110°20'03.00" (110.334167)

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 08-31-09	DATE DRAWN: 09-01-09
PARTY D.K. D.M. K.G.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE PETROGLYPH OPERATING CO., INC.	

NOTICE OF SURFACE USE AND EASEMENT FOR RIGHT OF WAY

PETROGLYPH OPERATING COMPANY, INC., whose address is P.O. Box 70019 Boise, Idaho 83707 (Grantee), hereby gives notice to Douglas Barton whose address is 1548 E. Cherry Creek Lane Draper, UT 84020, successor in interest to Grantor, pursuant to the terms and provisions of the Surface Use and Right of Way Agreement dated June 26, 1997 by and between Lamont W. Moon and Gay G. Moon, as Trustees for the Gay G. Moon Trust, and Petroglyph Operating Company, Inc., (Grantor and Grantee), of the exercise of rights granted under the Agreement, for the purposes and affecting the property and interests of Grantor as follows:

To establish a multiple use Corridor Right of Way for the operations of Grantee on the lands herein listed.

In, over, upon and through the following described lands in Duchesne County, Utah:

Township 4 South, Range 4 West USM
Section 28: Use Corridor 1.564 acres m/l.
Section 28: Drillsite location 2.262 acres m/l

Said Right of Way and surface use to be approximately 1,173.8 feet in length, 60 feet in width, and containing 1.564 acres and said Drillsite location being approximately 2.262 acres, for a total of 3.826 acres, m/l, and more particularly described and shown on the plat(s) attached hereto.

IN WITNESS THEREOF, PETROGLYPH OPERATING COMPANY, INC. has caused this instrument to be executed this 29 day of September, 2009.

Petroglyph Operating Company, Inc.

By _____

State of Idaho
County of Ada

On the 29th day of September, 2009, personally appeared before me, Paul Powell, and after being by me duly sworn did say that he is the Executive Vice President/COO for Petroglyph Operating Company, Inc. and that said instrument was signed on behalf of said corporation by the authority of its by-laws and said Paul Powell acknowledged to me that said corporation executed same.

My commission expires: 6-21-2013

Vera Alexander
Notary Public

VERA ALEXANDER NOTARY PUBLIC STATE OF IDAHO

CONFIDENTAL

EIGHT POINT PLAN

FEE 28-09D4
NE/SE SEC. 28, T4S, R4W
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Mahogany Shale	2907	3150
"X" Marker	4129	1928
Douglas Creek	4784	1273
"B" Limestone	5204	853
B/Castle Peak Limestone	5759	298
Total Depth	6214	157

Anticipated BHP 2520

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS FORMATIONS:

Substance	Formation	Depth	Subsea
Oil/Gas	Douglas Creek	4784	1273
Oil/Gas	B/Castle Peak	5759	298
Other mineral zones	N/A		

3. PRESSURE CONTROL EQUIPMENT: BOP Schematic Diagram attached.

4. CASING PROGRAM:

***Note: Pilot hole will be drilled to 6277' for logs and core. Cement plug will be set from 5687' 5887'and well kicked off directionally at 5737'.**

Hole	Casing	Top – MD	Bottom – MD	Weight lb/ft	Grade	Thread
18"	14"	sfc	40'	steel	cond	none
12 ¼"	9 5/8"	sfc	480'	36.0	J-55	STC
8 ¾"	7"	sfc	6500'	26.0	L-80	LTC

Casing Strengths:				Collapse	Burst	Tensile
9 5/8"	36.0 lb.	J-55	STC	2,020 psi	3,520 psi	394,000 lb
7"	26.0 lb.	L-80	LTC	5,410 psi	7,240 psi	511,000 lb

The horizontal lateral of this well will be cased with a slotted liner.

Hole	Casing	Top – MD	Bottom – MD	Weight lb/ft	Grade
6 1/8"	4 ½"	6300'	8504'	11.6	J-55

All casing will be new or inspected.

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5. MUD PROGRAM

INTERVAL	MUD TYPE
0' - 480'	Air/Aerated Water
480' – TD	Water & KCL water or KCL substitute Gel/polyacrylamide plolymer w/5-10% LCM, LSND as conditions warrant

Sufficient mud inventory will be maintained on location during drilling to handle any adverse conditions that may arise.

6. CEMENT PROGRAM:

20" Conductor:
Cement to surface with construction cement.

9 5/8" Casing: sfc-480' (MD)
Lead/Tail Slurry: 0' - 480': 170 sks (310 cu ft) Lite cement + 0.25 lblsk Kwik Seal + 0.125 lb/sk Poly-E-Flake. Slurry wt: 13.5 ppg, Slurry yield: 1.81 ft^3/sk, Slurry volume: 12-1/4" hole + 25% excess.

7" Casing: sfc-6500' (MD)
Lead Slurry: sfc-4000': 200 sx Light Cement (11 PPG±, 3.81 ft^3/sk) plus LCM (hole + 25% excess).
Tail Slurry:
4000'-6500': 372 sx 50/50 Pozmix (14 ppg± , 1.25ft^3/sk) + 2% Gell + 5% Salt + 0.125 lb/sk Poly-E-flake (hole + 25% excess).

4 1/2" Perforated Liner: 6300' – 8504' (MD)
No cement, dropped in open hole.

7. VARIANCE REQUESTS:

Reference: Onshore Oil and Gas Order No. 2 – Item E: Special Drilling Operations

1. Operator requests a variance to regulations requiring the blooie line discharge be 100' from the well bore. Due to reduced location size, the blooie line discharge will be approximately 75' from the well bore and securely anchored.

2. Operator requests a variance to regulations requiring a straight run blooie line. Due to the location of the flare pit the blooie line will have two targeted "Ts".

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3. Operator requests a variance to regulations requiring Deduster Equipment on the blooie line. A mister will be used at the end of the blooie line when drilling with air only.

4. Operator requests a variance to regulations requiring an automatic igniter or continuous pilot light on the blooie line. An air/air-mist drilling system will be used.

5. Operator requests a variance to regulations requiring the compressors be located in the opposite direction from the blooie line a minimum of 100 feet from the well bore. Due to reduced location size the compressors will be located as close as is reasonable to the opposite direction from the blooie line and 75' from the well bore.

8. OPERATIONS:

All engine exhausts within 100 feet of the well bore will be equipped with spark arrestors.

All cuttings and circulating medium shall be directed into the reserve or booie pit.

A float valve will be run above the bit with sufficient rating to prevent flow back.

An air/mist and fluid/mud drilling system will be used.

All 5 1/2" casing will be new or inspected J-55 LT &C with a collapse resistance of 4,040 psi an internal yield pressure of 4,810 psi and a joint strength of 239,000 psi.

9. EVALUATION PROGRAM:

Logs: Platform Express TD to 6277' in pilot hole.
(DLL, MSFL, CNG, CDL, GR)

Cores: from 6184' to 6227'
DST: None Programmed

Completion: To be submitted at a later date.

10. ABNORMAL CONDITIONS:

None anticipated.

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11. STANDARD REQUIRED EQUIPMENT:

None Required

12. HAZARDOUS CHEMICALS:

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

(Attachment: BOP Schematic Diagram)

CONFIDENTIAL

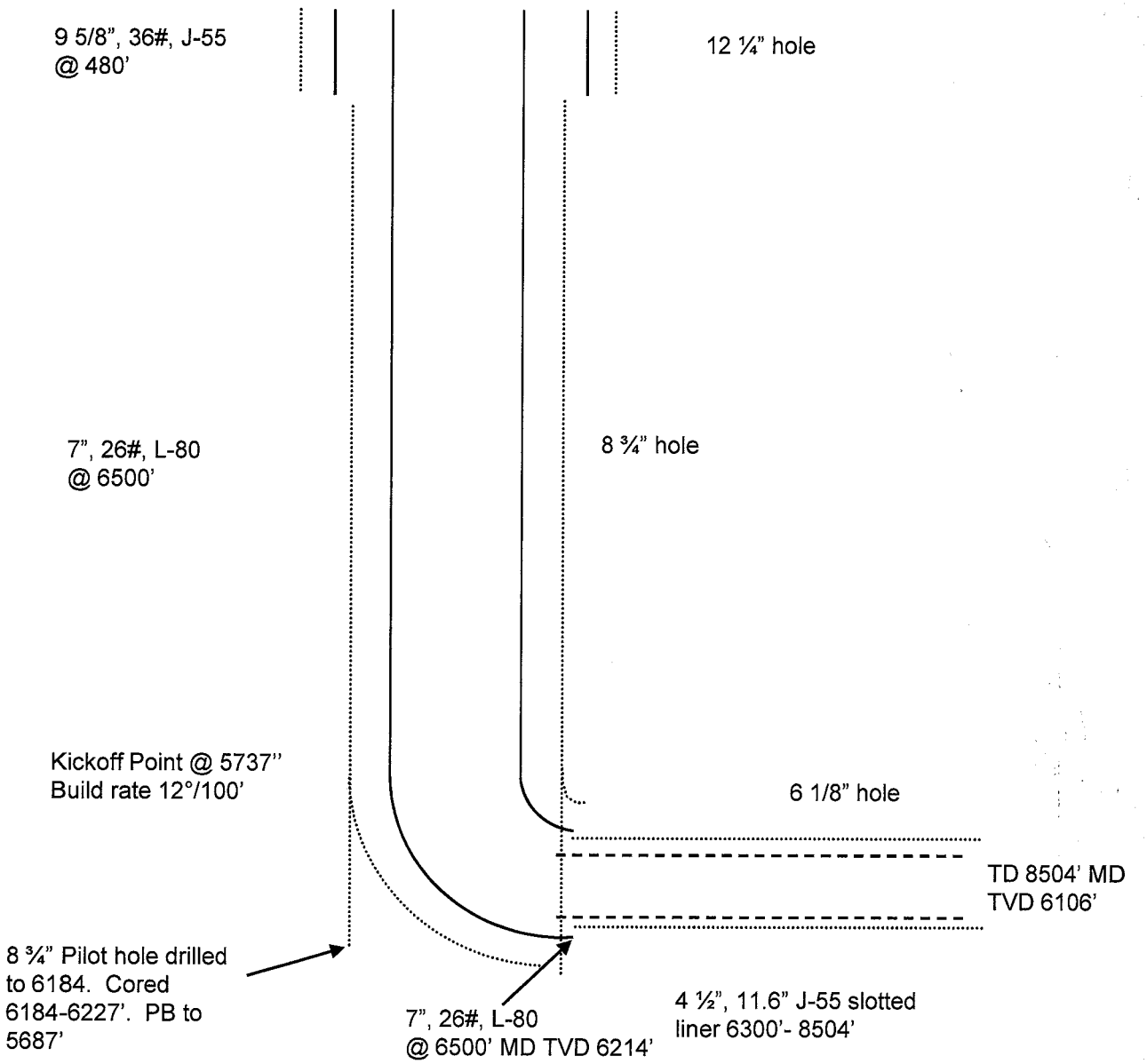
PETROGLYPH OPERATING CO., INC.

FEE 28-09D4
NEW HORIZONTAL WELL
SUMMARIZED PROCEDURE

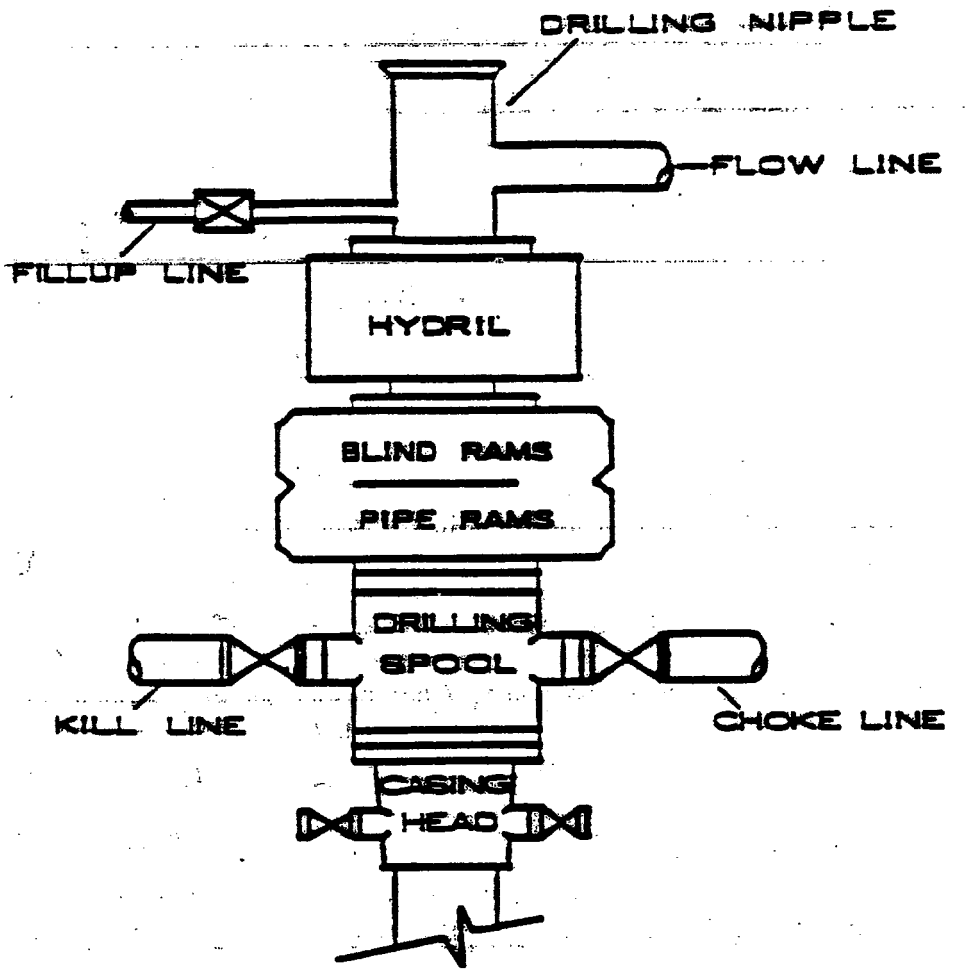
1. MIRU air rig.
2. Drill 12 1/4" surface hole to 480'±.
3. Run 9 5/8", 36#, J-55, STC casing and cement to surface.
4. RD air rig, move off location.
5. MIRU drilling rig.
6. NU rig's 3,000 WP rated BOP. Test BOP's and surface casing.
7. PU straight hole BHA, drill out surface casing and 10' of new formation, run FIT.
8. Drill 8 3/4" hole to 6184' (-137' BMSL).
9. TOOH, PU core tools and cut core from 6184' to 6227'.
10. PU 8 ¾" BHA. Ream from 6184' to 6227'. Drill hole to 6277'.
11. TOOH. Log well.
12. PU pipe. RIH to 5887'. Spot cement plug from 5687' to 5887'. 67 sx, 83.5 cf.
13. TOOH. WOC.
14. PU 8 ¾" directional BHA, TIH. Tag plug at 5687'.
15. Drill to 5,737', kick off and drill well at a 214.20° azimuth with 12°/100' build rate to land in Basal Carbonate formation at a TVD of +/- 6,214'; 6,486' MD.
16. Drill in zone to 6,500' MD. TOOH, LDDP.
17. PU and run 7", 26#, L-80, LTC casing to 6,500', cement casing.
18. PU 3 1/2" DP, directional BHA, TIH.
19. Drill +/- 2,000' of 6 1/8" lateral in Basal Carbonate.
    a. Mud system to be a KCl weighted water-based mud, weights are expected to be in the 9.0-10.0 ppg range.
20. Circulate and condition hole, TOOH, LD 2,300' DP.
    a. PU 2,000' of 4 1/2" slotted liner, 200' of blank liner and liner dropping tool.
    b. RIH w/ liner and dropping tool, drop liner at 6,300'.
    c. LDDP.
21. ND BOP's.
22. RDMO.

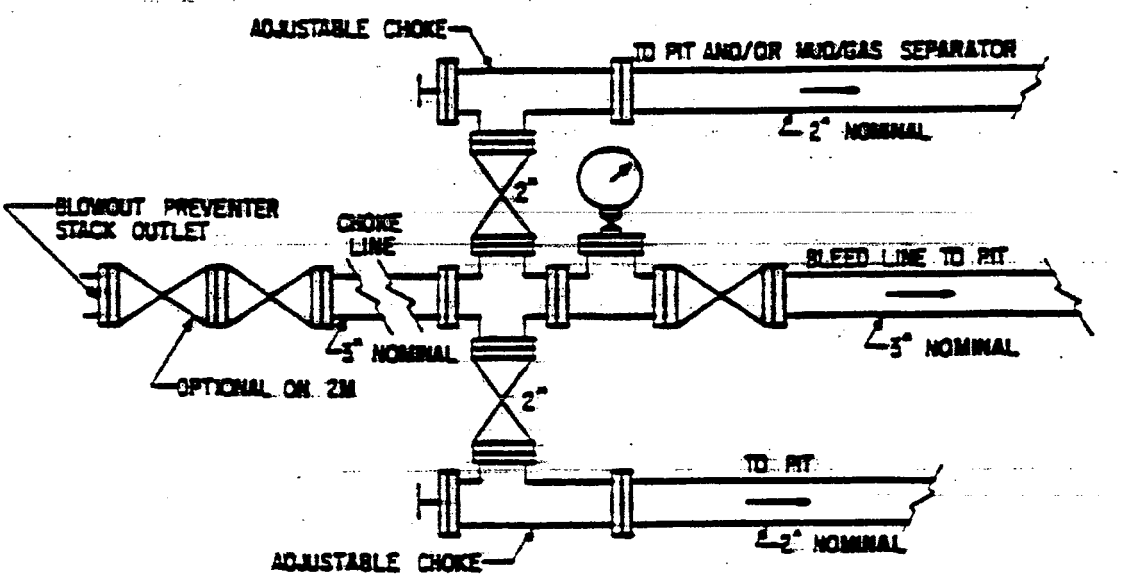
PETROGLYPH

FEE 28-09D4
NE/SE, SEC. 28, T4S, R4W
DUCHESNE COUNTY, UTAH



SCHEMATIC DIAGRAM OF 2000 PSI BOP STACK





Scientific Drilling
Rocky Mountain Operations

Project: Duchesne County, UT NAD83
Site: Fee 28-09D4
Well: Fee 28-09D4
Wellbore: OH
Design: Plan #1

Petroglyph Operating Co. Inc.

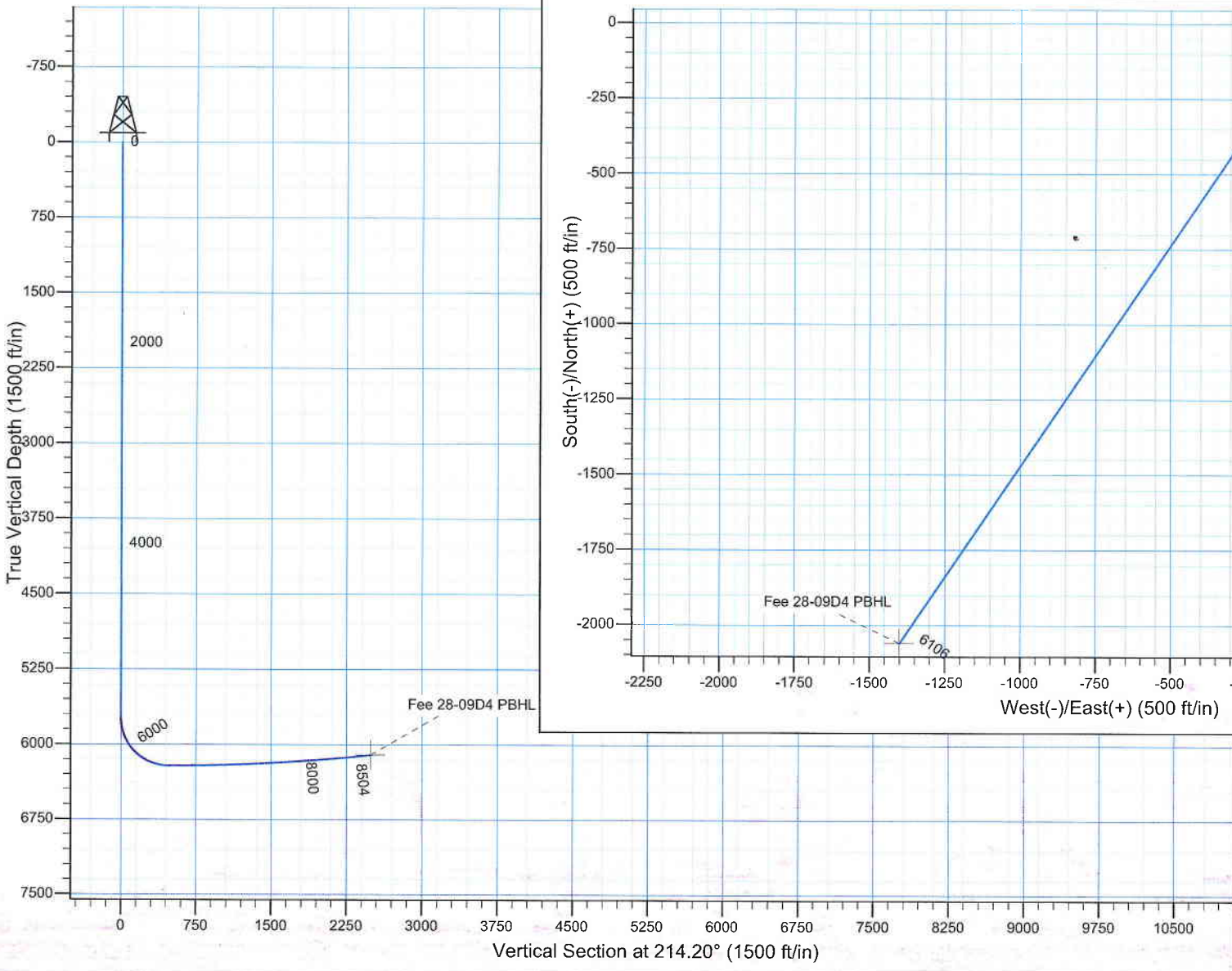
T
MAzimuths to True North
Magnetic North: 11.64°

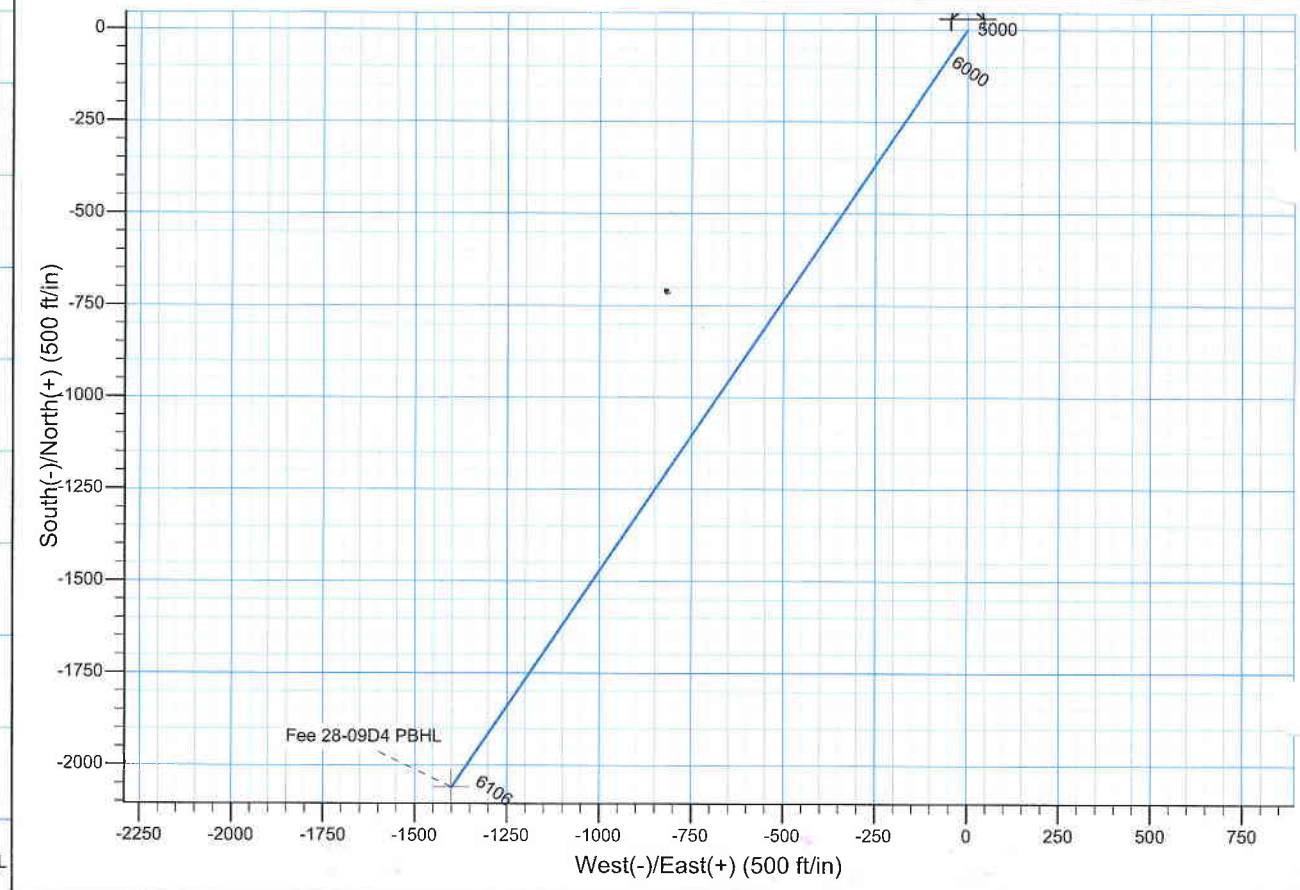
Magnetic Field
Strength: 52462.5snT
Dip Angle: 65.84°
Date: 2009-09-16
Model: IGRF2005-10

WELL DETAILS: Fee 28-09D4

GL 6047' & RKB 10' @ 6057.00ft (RKB)

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.00	0.00	7208923.05	1966303.92	40° 6' 16.320 N	110° 20' 5.560 W





Plan: Plan #1 (Fee 28-09D4/OH)

Created By: Julie Cruse Date: 2009-09-24

PROJECT DETAILS: Duchesne County, UT NAD83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Utah Central Zone
System Datum: Mean Sea Level
Local North: True North

Scientific Drilling
Rocky Mountain Operations

Petroglyph Operating Co. Inc.

Duchesne County, UT NAD83
Fee 28-09D4
Fee 28-09D4
OH

Plan: Plan #1

Standard Planning Report

24 September, 2009

Database:	EDM 2003.16 Multi User Db	**Local Co-ordinate Reference:**	Well Fee 28-09D4
Company:	Petroglyph Operating Co. Inc.	**TVD Reference:**	GL 6047' & RKB 10' @ 6057.00ft (RKB)
Project:	Duchesne County, UT NAD83	**MD Reference:**	GL 6047' & RKB 10' @ 6057.00ft (RKB)
Site:	Fee 28-09D4	**North Reference:**	True
Well:	Fee 28-09D4	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project Duchesne County, UT NAD83

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site Fee 28-09D4

Site Position:		**Northing:**	7,208,923.06 ft	**Latitude:**	40° 6' 16.320 N
From:	Lat/Long	**Easting:**	1,966,303.92 ft	**Longitude:**	110° 20' 5.560 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	0.75 °

Well Fee 28-09D4, 2500' FSL 600' FEL Sec 28 T4S R4W

Well Position	**+N/-S**	0.00 ft	**Northing:**	7,208,923.05 ft	**Latitude:**	40° 6' 16.320 N
	+E/-W	0.00 ft	**Easting:**	1,966,303.92 ft	**Longitude:**	110° 20' 5.560 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,047.00 ft

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2005-10	2009-09-16	11.64	65.84	52,463

Design Plan #1

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.00	0.00	0.00	214.20

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,737.00	0.00	0.00	5,737.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,486.27	90.00	214.20	6,214.00	-394.52	-268.11	12.01	12.01	0.00	214.20	
8,503.99	96.14	214.21	6,106.00	-2,060.05	-1,400.22	0.30	0.30	0.00	0.10	Fee 28-09D4 PBHL

Database:	EDM 2003.16 Multi User Db	**Local Co-ordinate Reference:**	Well Fee 28-09D4
Company:	Petroglyph Operating Co. Inc.	**TVD Reference:**	GL 6047' & RKB 10' @ 6057.00ft (RKB)
Project:	Duchesne County, UT NAD83	**MD Reference:**	GL 6047' & RKB 10' @ 6057.00ft (RKB)
Site:	Fee 28-09D4	**North Reference:**	True
Well:	Fee 28-09D4	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Database:	EDM 2003.16 Multi User Db	**Local Co-ordinate Reference:**	Well Fee 28-09D4
Company:	Petroglyph Operating Co. Inc.	**TVD Reference:**	GL 6047' & RKB 10' @ 6057.00ft (RKB)
Project:	Duchesne County, UT NAD83	**MD Reference:**	GL 6047' & RKB 10' @ 6057.00ft (RKB)
Site:	Fee 28-09D4	**North Reference:**	True
Well:	Fee 28-09D4	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,737.00	0.00	0.00	5,737.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	7.57	214.20	5,799.82	-3.44	-2.34	4.15	12.01	12.01	0.00
5,900.00	19.58	214.20	5,896.85	-22.82	-15.50	27.58	12.01	12.01	0.00
6,000.00	31.59	214.20	5,986.88	-58.47	-39.73	70.69	12.01	12.01	0.00
6,100.00	43.60	214.20	6,065.96	-108.83	-73.96	131.58	12.01	12.01	0.00
6,200.00	55.61	214.20	6,130.65	-171.71	-116.69	207.61	12.01	12.01	0.00
6,300.00	67.63	214.20	6,178.09	-244.35	-166.06	295.43	12.01	12.01	0.00
6,400.00	79.64	214.20	6,206.22	-323.56	-219.89	391.20	12.01	12.01	0.00
6,486.27	90.00	214.20	6,214.00	-394.52	-268.11	477.00	12.01	12.01	0.00
6,500.00	90.04	214.20	6,213.99	-405.88	-275.83	490.73	0.30	0.30	0.00
6,600.00	90.35	214.20	6,213.66	-488.58	-332.04	590.73	0.30	0.30	0.00
6,700.00	90.65	214.20	6,212.79	-571.29	-388.25	690.73	0.30	0.30	0.00
6,800.00	90.95	214.20	6,211.39	-653.99	-444.45	790.72	0.30	0.30	0.00
6,900.00	91.26	214.20	6,209.46	-736.68	-500.65	890.70	0.30	0.30	0.00
7,000.00	91.56	214.20	6,206.99	-819.36	-556.85	990.67	0.30	0.30	0.00
7,100.00	91.87	214.20	6,204.00	-902.03	-613.03	1,090.62	0.30	0.30	0.00
7,200.00	92.17	214.20	6,200.48	-984.68	-669.21	1,190.56	0.30	0.30	0.00
7,300.00	92.48	214.20	6,196.42	-1,067.32	-725.38	1,290.48	0.30	0.30	0.00
7,400.00	92.78	214.20	6,191.84	-1,149.93	-781.54	1,390.37	0.30	0.30	0.00
7,500.00	93.08	214.21	6,186.72	-1,232.53	-837.68	1,490.24	0.30	0.30	0.00
7,600.00	93.39	214.21	6,181.07	-1,315.10	-893.80	1,590.08	0.30	0.30	0.00
7,700.00	93.69	214.21	6,174.90	-1,397.64	-949.91	1,689.89	0.30	0.30	0.00
7,800.00	94.00	214.21	6,168.19	-1,480.16	-1,006.00	1,789.66	0.30	0.30	0.00
7,900.00	94.30	214.21	6,160.95	-1,562.64	-1,062.08	1,889.40	0.30	0.30	0.00
8,000.00	94.61	214.21	6,153.19	-1,645.09	-1,118.12	1,989.10	0.30	0.30	0.00
8,100.00	94.91	214.21	6,144.89	-1,727.51	-1,174.15	2,088.76	0.30	0.30	0.00
8,200.00	95.21	214.21	6,136.07	-1,809.89	-1,230.15	2,188.37	0.30	0.30	0.00
8,300.00	95.52	214.21	6,126.72	-1,892.22	-1,286.13	2,287.93	0.30	0.30	0.00
8,400.00	95.82	214.21	6,116.84	-1,974.52	-1,342.07	2,387.44	0.30	0.30	0.00
8,500.00	96.13	214.21	6,106.43	-2,056.76	-1,397.99	2,486.89	0.30	0.30	0.00
8,503.99	96.14	214.21	6,106.00	-2,060.05	-1,400.22	2,490.86	0.30	0.30	0.00

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Fee 28-09D4 PBHL - plan hits target center - Point	0.00	0.00	6,106.00	-2,060.05	-1,400.22	7,206,844.94	1,964,930.66	40° 5' 55.960 N	110° 20' 23.580 W

PETROGLYPH OPERATING CO., INC.
FEE #28-09D4
SECTION 28, T4S, R4W, U.S.B.&M.

PROCEED IN AN EASTERLY DIRECTION FROM DUCHESNE, UTAH ALONG HIGHWAY 40 APPROXIMATELY 3.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 3.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 2.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM DUCHESNE, UTAH TO PROPOSED WELL LOCATION IS APPROXIMATELY 9.7 MILES.

PETROGLYPH OPERATING CO., INC.

FEE #28-09D4

LOCATED IN DUCHESNE COUNTY, UTAH
SECTION 28, T4S, R4W, U.S.B.&M.

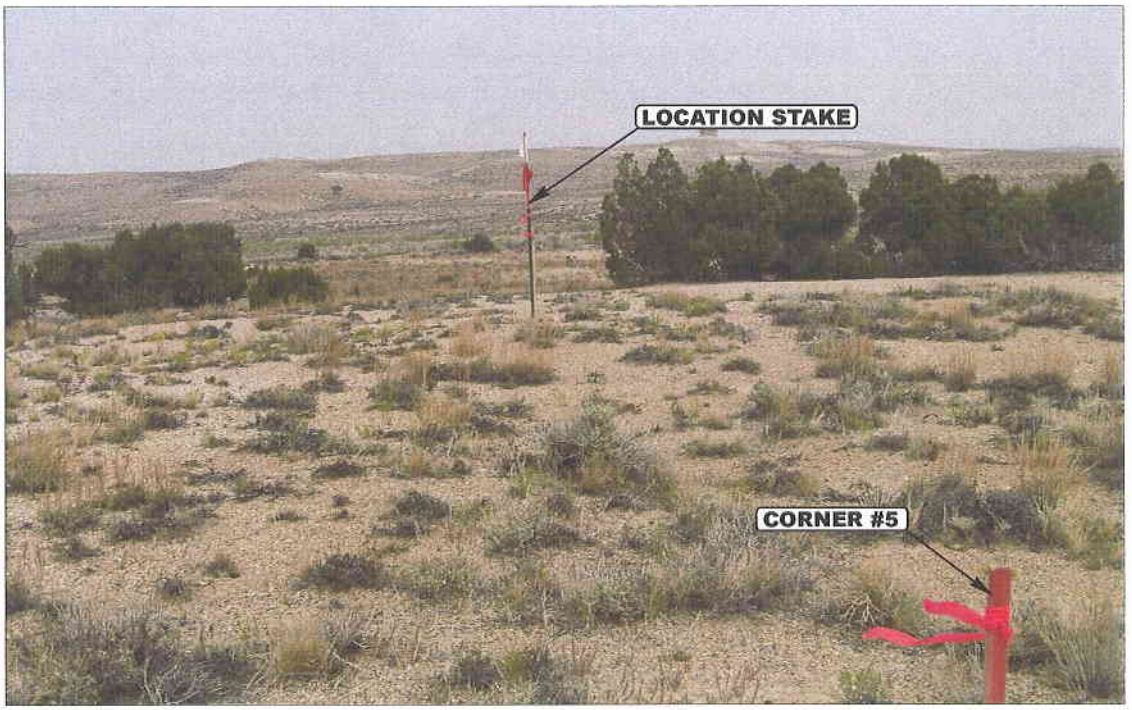


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE **CAMERA ANGLE: NORTHEASTERLY**

PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS **CAMERA ANGLE: SOUTHEASTERLY**

- Since 1964 -

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS	09 MONTH	01 DAY	09 YEAR	PHOTO
TAKEN BY: A.F.	DRAWN BY: J.H.	REVISED: 00-00-00		

PETROGLYPH OPERATING CO., INC.

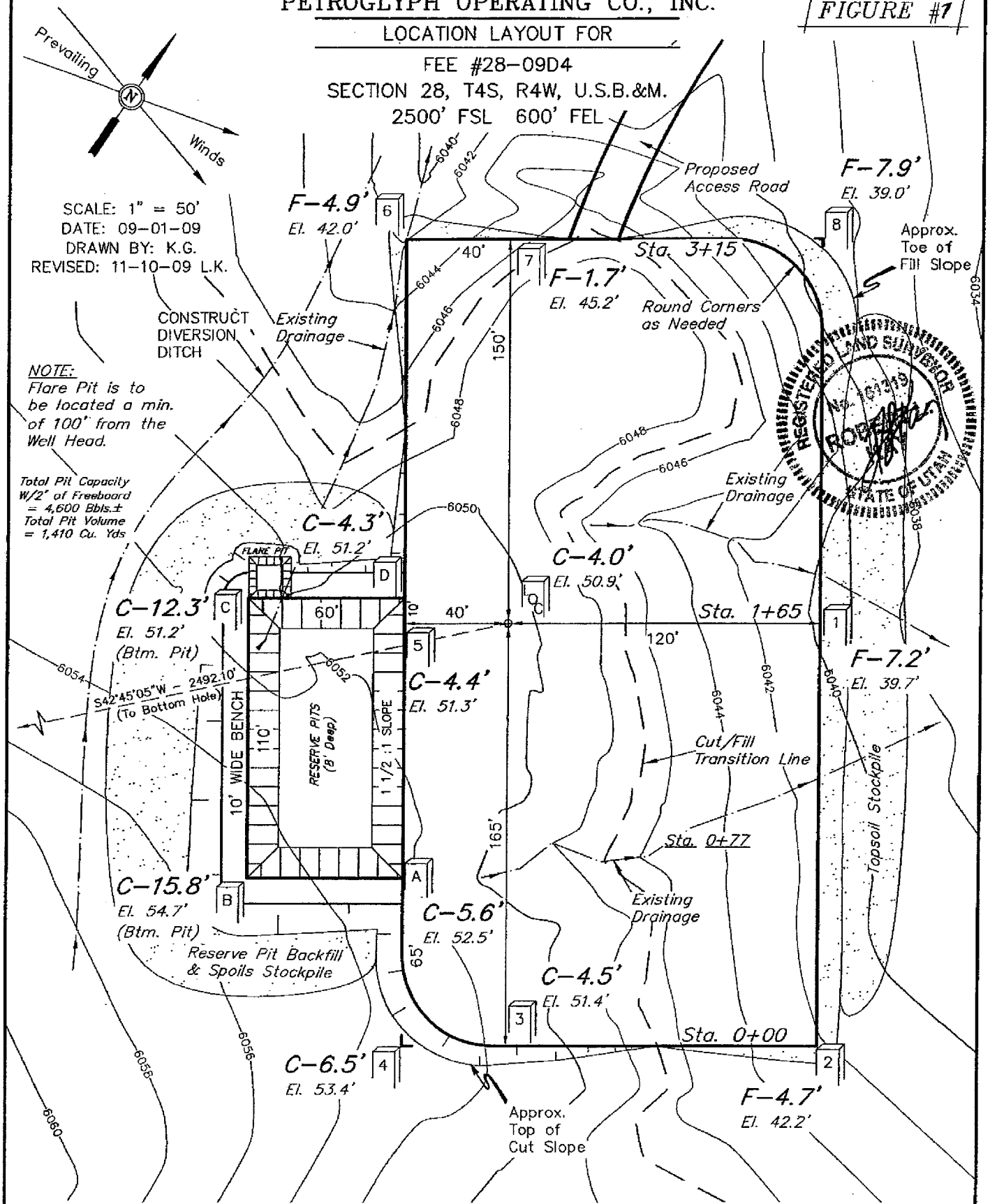
FIGURE #1

LOCATION LAYOUT FOR

FEE #28-09D4

SECTION 28, T4S, R4W, U.S.B.&M.

2500' FSL 600' FEL



Elev. Ungraded Ground At Loc. Stake = 6050.9'

FINISHED GRADE ELEV. AT LOC. STAKE = 6046.9'

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

PETROGLYPH OPERATING CO., INC.

TYPICAL CROSS SECTION FOR

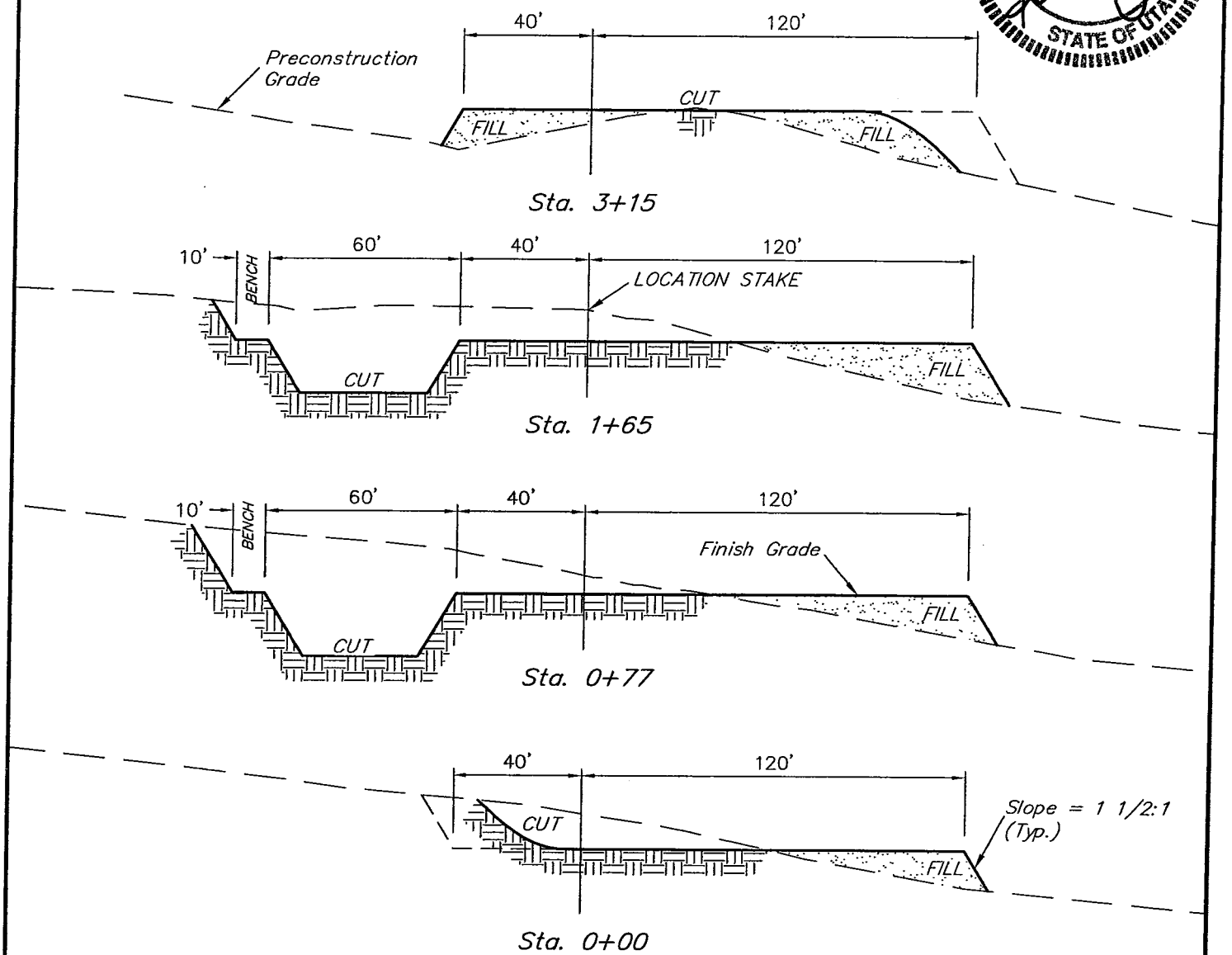
FEE #28-09D4
SECTION 28, T4S, R4W, U.S.B.&M.
2500' FSL 600' FEL

FIGURE #2

X-Section Scale
1" = 20'
1" = 50'

DATE: 09-01-09
DRAWN BY: K.G.

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH



NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE	= ± 2.262 ACRES
ACCESS ROAD DISTURBANCE	= ± 0.756 ACRES
PIPELINE DISTURBANCE	= ± 2.307 ACRES
TOTAL	= ± 5.325 ACRES

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(12") Topsoil Stripping	=	2,600 Cu. Yds.
Remaining Location	=	4,910 Cu. Yds.
TOTAL CUT	=	7,510 CU.YDS.
FILL	=	4,200 CU.YDS.

EXCESS MATERIAL	=	3,310 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	3,310 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	0 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

PETROGLYPH OPERATING CO., INC.

FIGURE #3

TYPICAL RIG LAYOUT FOR

FEE #28-09D4

SECTION 28, T4S, R4W, U.S.B.&M.

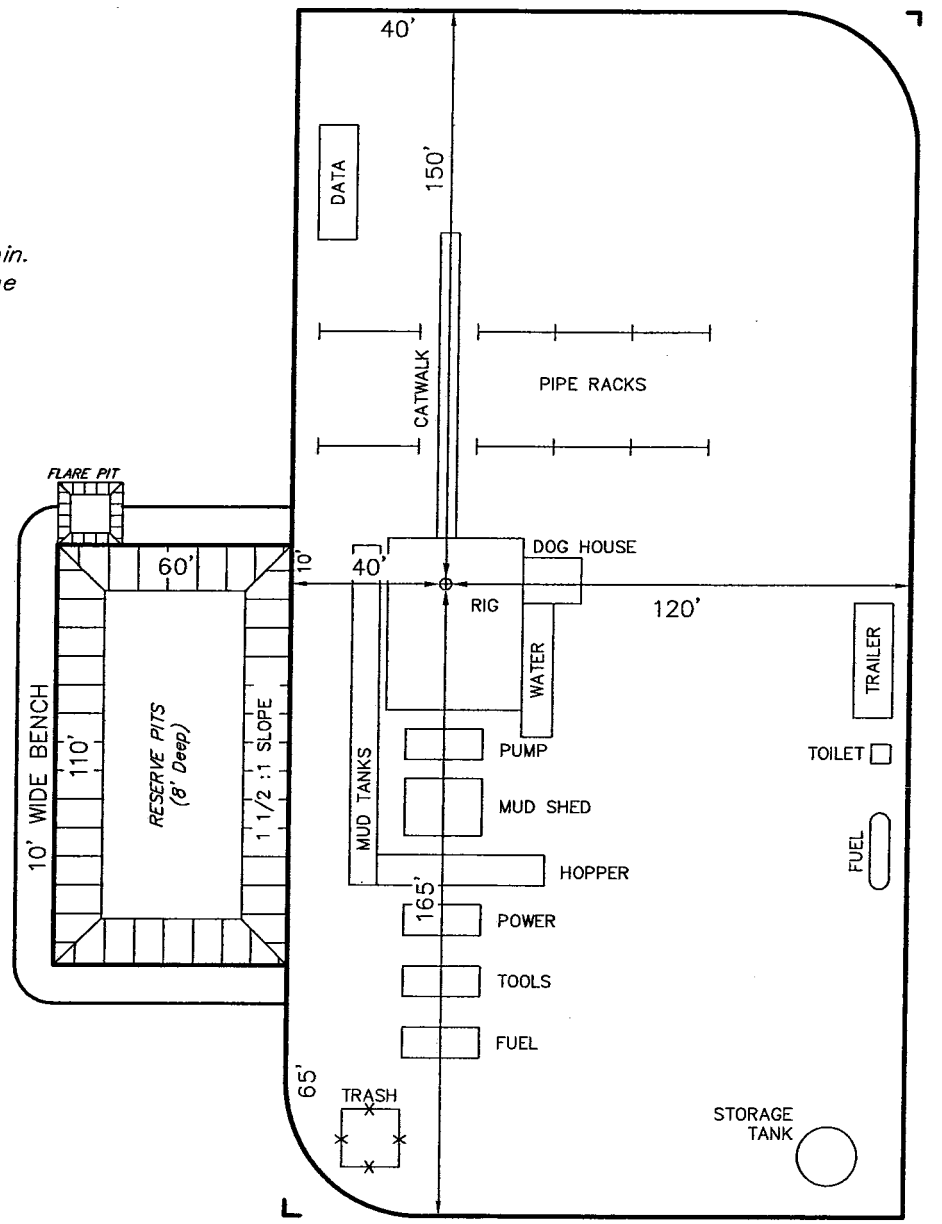
2500' FSL 600' FEL

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH

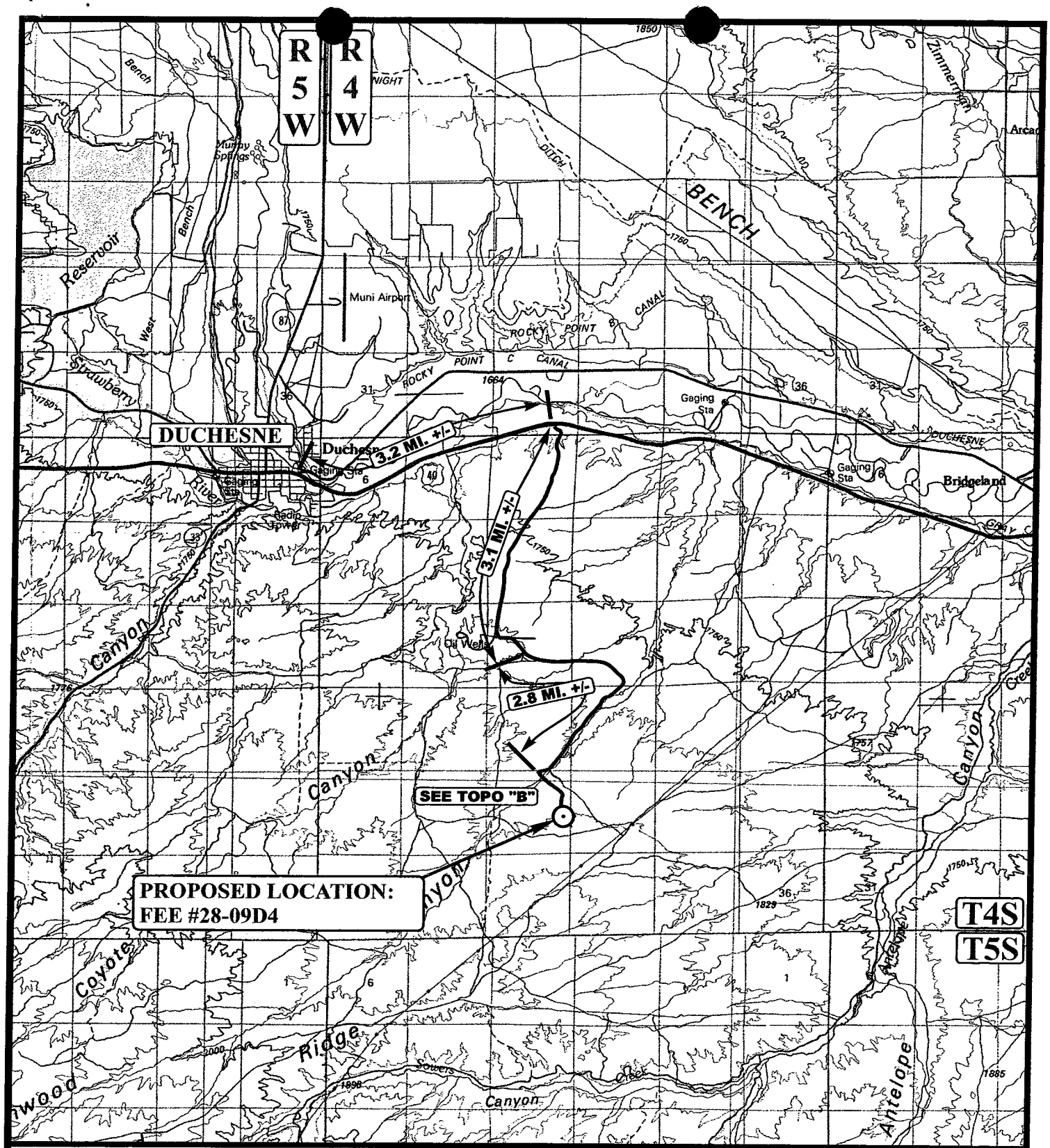
SCALE: 1" = 50'
DATE: 09-01-09
DRAWN BY: K.G.

NOTE:
Flare Pit is to be located a min. of 100' from the Well Head.

Total Pit Capacity W/2' of Freeboard = 4,600 Bbls.± Total Pit Volume = 1,410 Cu. Yds



UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017



LEGEND:

⊙ PROPOSED LOCATION

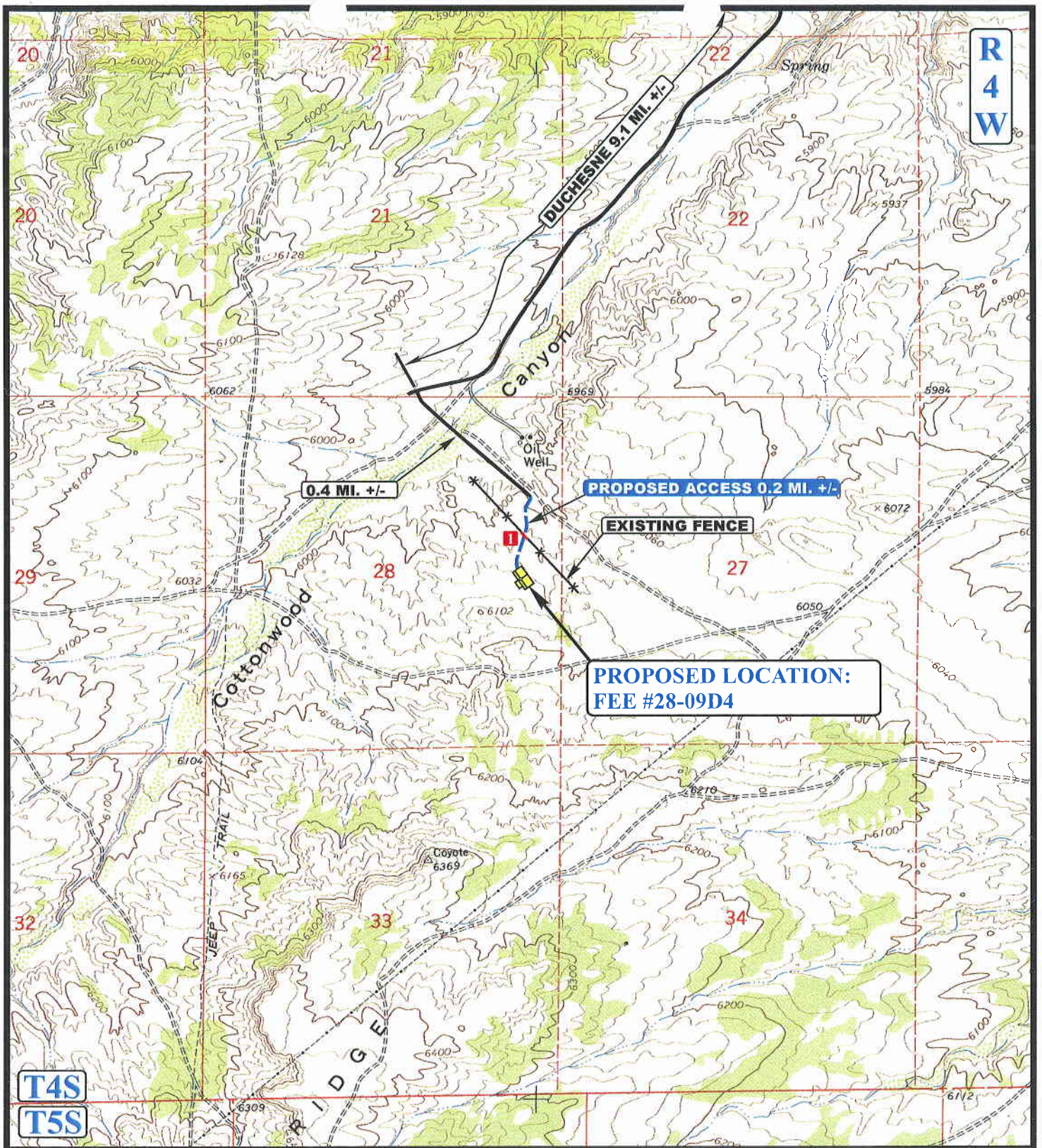
N

PETROGLYPH OPERATING CO.,INC.

FEE #28-09D4
SECTION 28, T4S, R4W, U.S.B.&M.
2500' FSL 600' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	01 DAY	09 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: J.H.	REVISED: 00-00-00		



LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD
- EXISTING FENCE
- 1 INSTALL CATTLE GUARD

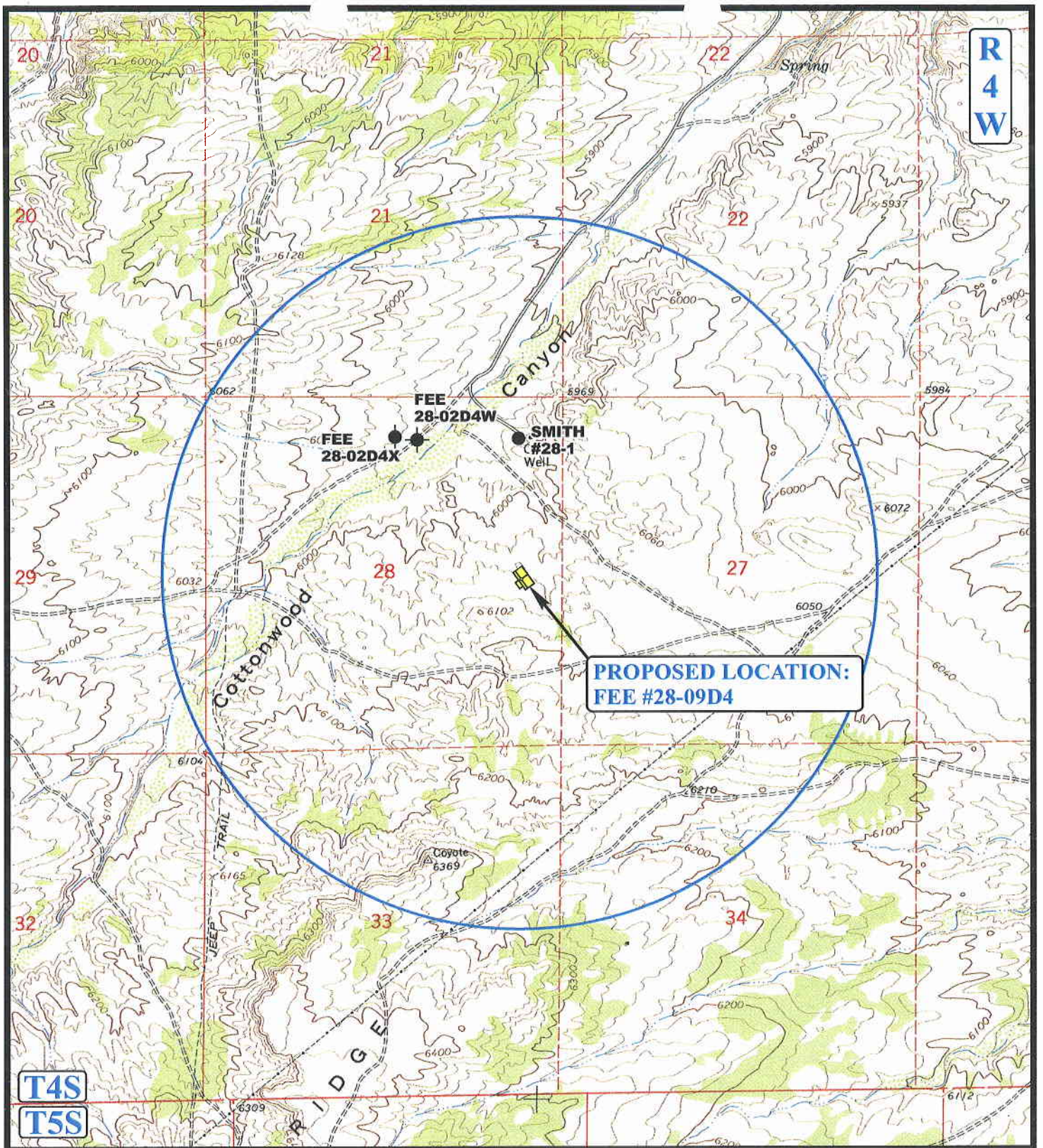
N

PETROGLYPH OPERATING CO.,INC.

FEE #28-09D4
SECTION 28, T4S, R4W, U.S.B.&M.
2500' FSL 600' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	01 DAY	09 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: J.H.	REVISED: 00-00-00		



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

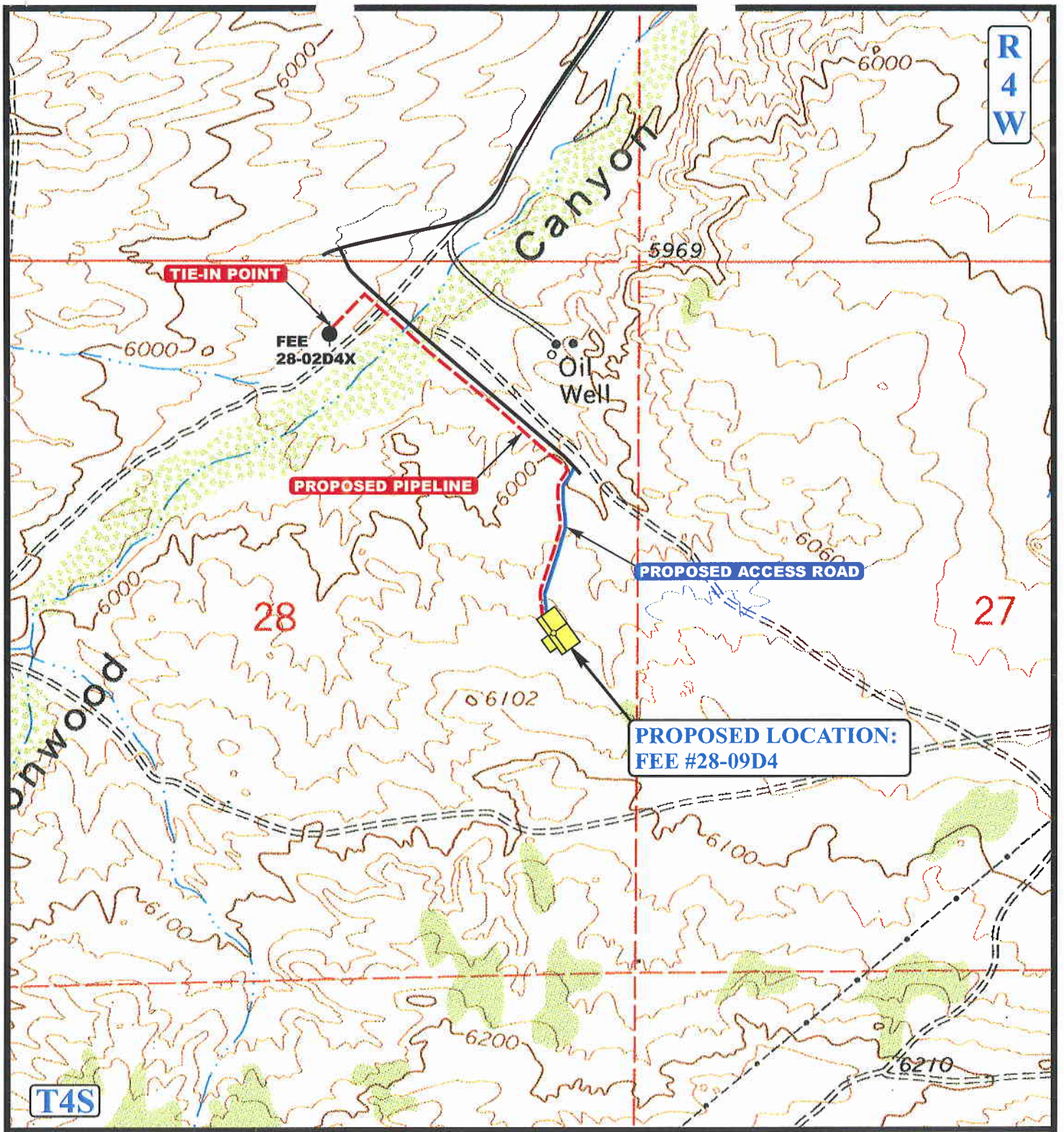
N

PETROGLYPH OPERATING CO.,INC.

FEE #28-09D4
SECTION 28, T4S, R4W, U.S.B.&M.
2500' FSL 600' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	01 DAY	09 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: J.H.	REVISED: 00-00-00		



APPROXIMATE TOTAL PIPELINE DISTANCE = 3,350' +/-

LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE

N

PETROGLYPH OPERATING CO.,INC.

FEE #28-09D4
SECTION 28, T4S, R4W, U.S.B.&M.
2500' FSL 600' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	01 DAY	09 YEAR	D TOPO
SCALE: 1" = 1000'	DRAWN BY: J.H.	REVISED: 00-00-00		

Diana Mason - Water source permit for Petroglyph wells

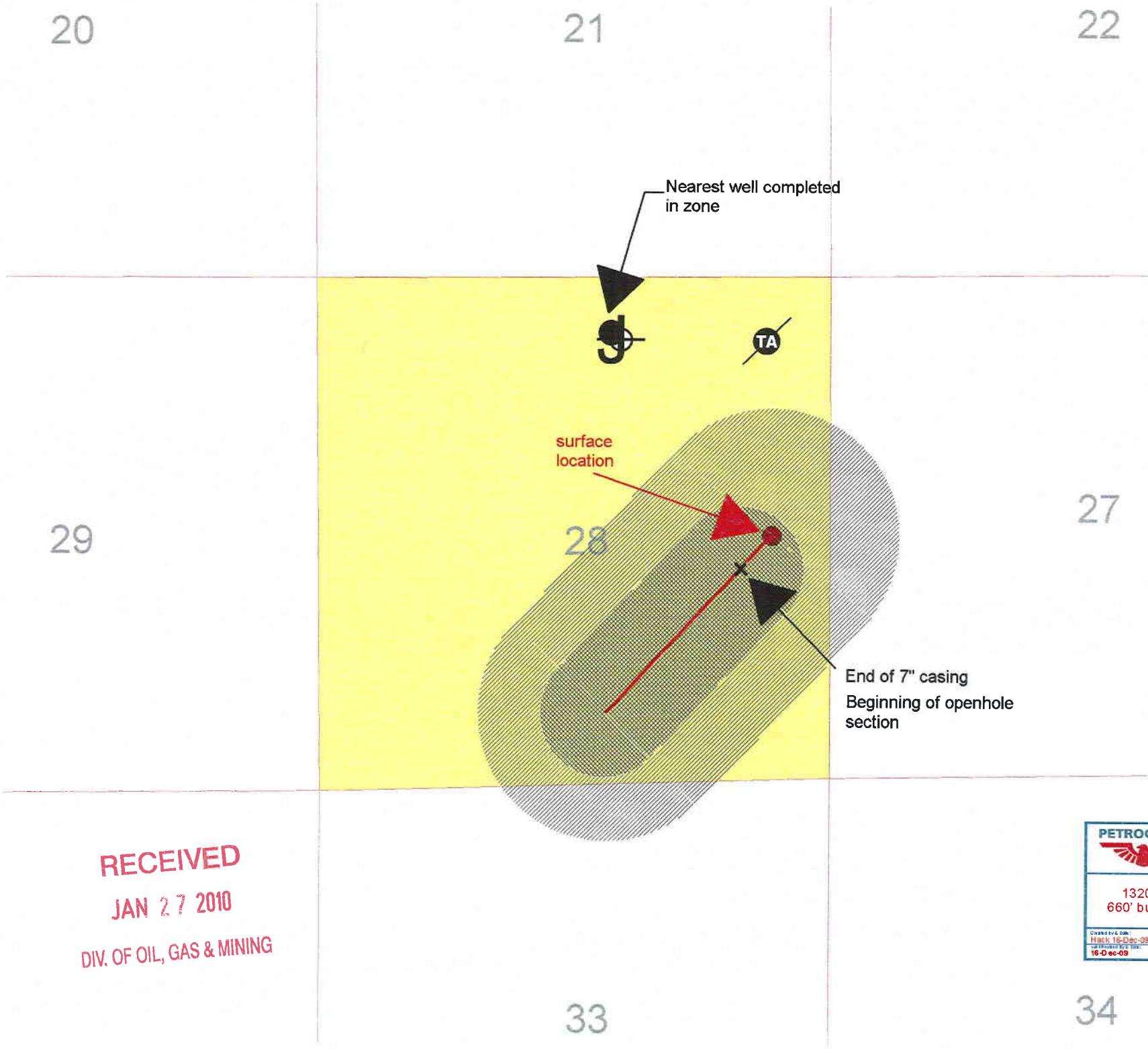
From: "Ed Trotter"
To: "Diana Mason"
Date: 11/24/2009 8:20 AM
Subject: Water source permit for Petroglyph wells

Hi Diana,

The water source permit number for all the Petroglyph wells is #43-8342 under the East Duchesne Culinary Water Improvement District. If you need anything else please give me a call.

Thanks for your help,

Ed Trotter
1620 West 750 North
P.O. Box 1910
Vernal, UT 84078
Phone (435)789-4120
Cell (435)790-1158
Fax: (435)789-1420
E-mail: edtrotter@easilink.com



RECEIVED
JAN 27 2010
DIV. OF OIL, GAS & MINING

PETROGLYPH

ANTELOPE CREEK
DUCHESNE COUNTY, UTAH

1320' buffer around entire well
660' buffer around openhole lateral

Created by & Date:
Hack 16-Dec-09
Last Revised by & Date:
16-Dec-09

PETROGLYPH

Petroglyph Energy, Inc.
Denver Office

535 16th Street, Suite 260
Denver, CO 80202

303-623-5995
303-623-5994 fax

December 16, 2009

Kaiser-Francis Oil Company
Attn: Mr. Wayne A. Fields
Manager of Production Land Department
P.O. Box 21468
Tulsa, OK 74121-1468

Certified 7003 1010 0000 5672 3229

Re: Horizontal Well
T4S, R4W, USB & M
Section 28: All
Well Name: 28-09 D4
Duchesne County, UT

Dear Mr. Fields,

In compliance with DOGM regulations, Petroglyph hereby gives notice if its intent to file an Application for Permit to Drill for a horizontal test of the Green River Formation at a location within referenced section which is the designated temporary spacing unit for the well.

We have received your signed AFE which of course details the particulars of the location, depth, lateral extent and cost associated with the well.

Yours truly,

Philip Shepardson,
Land Manager

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
KAISER-FRANCIS OIL CO.
ATTN: WAYNE FIELDS
PO-BOX 21468
TULSA, OK 74121-1468

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)
B. Date of Delivery
C. Signature
X
☐ Agent
☐ Addressee
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7003 1010 0000 5672 3229

PS Form 3811, March 2001 Domestic Return Receipt 102595-01-M-14

RECEIVED
JAN 28 2010
DIV. OF OIL, GAS & MINING

January 28, 2010

Ms. Diana Mason
State of Utah
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: Horizontal Drilling R649-3-2-7
R649-3-2-3
R649-3-2-5

Fee 28-09D4: 2500' FSL, 600' FEL (Surface)
707' FSL, 2292' FEL (End of Horizontal Leg)
NE/SE, SECTION 28, T4S, R4W
DUCHESNE COUNTY, UTAH

Dear Ms. Mason,

Pursuant to the filing of Petroglyph Operating Co., Inc.'s Application for Permit to Drill regarding the above referenced well on November 18, 2009, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rules R649-3-2-7, R649-3-2-3, and R649-3-2-5 pertaining to the Siting of Horizontal Wells.

- Notice of the Application for Permit to Drill for a horizontal well has been given by certified mail to all owners within the boundaries of the designated temporary spacing unit.
- No portion of the horizontal interval within the potentially productive formation is closer than six hundred-sixty (660) feet to a drilling or spacing unit boundary, federally unitized area boundary, uncommitted tract within a unit, or boundary line of a lease not committed to the drilling of such horizontal well.
- Furthermore, No horizontal interval of this well is closer than one thousand three hundred and twenty (1,320) feet to any vertical well completed in and producing from the same formation.

Therefore, based on the above stated information, Petroglyph Operating Co., Inc. requests the permit be granted pursuant to R649-3-2-7, R649-3-2-3, and R649-3-2-5

Respectfully Submitted,

Ed Trotter,
Agent
P.O. Box 1910
Vernal, UT 84078
Phone: (435)789-4120
Fax: (435)789-1420
E-mail: edtrotter@easilink.com

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DIV. OF OIL, GAS & MINING

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

February 1, 2010

Petroglyph Operating Co., Inc.
P.O. Box 607
Roosevelt, UT 84066

Subject: Fee 28-09D4 Well, 2500' FSL, 600' FEL, NE SE, Sec. 28, T. 4 South, R. 4 West, Bottom Location 707' FSL, 2292' FEL, SW SE, Sec. 28, T. 4 South, R 4 West, Duchesne County, Utah

Ladies and Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-34293.

Sincerely,

Gil Hunt
Associate Director

GLH/js
Enclosures

cc: Duchesne County Assessor

Operator: Petroglyph Operating Co., Inc.
Well Name & Number Fee 28-09D4
API Number: 43-013-34293
Lease: Fee

Location:	NE SE	**Sec.** 28	**T.** 4 South	**R.** 4 West
Bottom Location:	SW SE	**Sec.** 28	**T.** 4 South	**R.** 4 West

Conditions of Approval

1. **General**

   Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. **Notification Requirements**

   The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

   - Within 24 hours following the spudding of the well – contact Carol Daniels
     OR
     Submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov
   - 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
   - 24 hours prior to cementing or testing casing – contact Dan Jarvis
   - Within 24 hours of making any emergency changes made to the approved drilling program – contact Dustin Doucet
   - 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

   The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

   - Any changes to the approved drilling plan – contact Dustin Doucet
   - Significant plug back of the well – contact Dustin Doucet
   - Plug and abandonment of the well – contact Dustin Doucet

   The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

   - Carol Daniels (801) 538-5284 office
   - Dustin Doucet (801) 538-5281 office
     (801) 733-0983 after office hours
   - Dan Jarvis at: (801) 538-5338 office
     (801) 942-0871 after office hours

3. **Reporting Requirements:**
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with Division of Oil, Gas and Mining, including but not limited to:
   - Entity Action Form (Form 6) – due within 5 days of spudding the well
   - Monthly Status Report (Form 9) – due by 5th day of the following calendar month
   - Requests to Change Plans (Form 9) – due prior to implementation
   - Written Notice of Emergency Changes (Form 9) – due within 5 days
   - Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
   - Report of Water Encountered (Form 7) - due within 30 days after completion
   - Well Completion Report (Form 8) - due within 30 days after completion or plugging

4. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

7. A temporary 640 acre spacing unit is hereby established in Section 28, Township 4S, Range 4W for the drilling of this well (R649-3-2.6). No other horizontal wells may be drilled in this section unless approved by the Board of Oil, Gas and Mining.

8. Cement volume for the 7" production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to surface as indicated in the submitted drilling plan.

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DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: **PETROGLYPH OPERATING COMPANY**

Well Name: **FEE 28-09D4**

Api No: **43-013-34293** Lease Type: **FEE**

Section **28** Township **04S** Range **04W** County **DUCHESNE**

Drilling Contractor **CRAIG'S ROUSTABOUT SERV** RIG # **BUCKET**

SPUDDED:

Date **03/04/2010**

Time _____

How **DRY**

Drilling will Commence: _____

Reported by **JASON BYWATER**

Telephone # **(435) 823-1240**

Date **03/08/2010** **Signed** **CHD**

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STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Fee 28-09D4

2. NAME OF OPERATOR: PETROGLYPH OPERATING COMPANY

9. API NUMBER: 4301334293

3. ADDRESS OF OPERATOR: P.O. BOX 607 CITY ROOSEVELT STATE UT ZIP 84066 PHONE NUMBER: (435) 722-2531

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE:

COUNTY: DUCHESNE

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 28 4S 4W U

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER: SPUD
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

We spudded on 3/4/2010 at 3:00 P.M. We drilled 40' of 20" hole and ran 40' and 14" conductor and cemented.

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NAME (PLEASE PRINT) Glenda Davis TITLE Office Manager

SIGNATURE Glenda Davis DATE 3/24/2010

(This space for State use only)

(5/2000)

(See Instructions on Reverse Side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: Petroglyph Operating Company
Address: P.O. Box 607
city Roosevelt
state UT zip 84066

Operator Account Number: N 3800

Phone Number: (435) 722-2531

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301334293	Fee 28-09D4		NESE	28	4S	4W	Duchesne
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	17556	3/4/2010			3/31/10	

Comments: CSLPK=GRRV BHL SWSE

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Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

ACTION CODES:

- **A** - Establish new entity for new well (single well only)
- **B** - Add new well to existing entity (group or unit well)
- **C** - Re-assign well from one existing entity to another existing entity
- **D** - Re-assign well from one existing entity to a new entity
- **E** - Other (Explain in 'comments' section)

Glenda Davis
Name (Please Print)

Glenda Davis
Signature

Office Manager
Title

3/24/2010
Date

(5/2000)

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DIV. OF OIL, GAS & MINING

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Petroglyph Energy, Inc.

960 Broadway Ave., Ste. 500
BOISE, ID 83706
(208) 685-7600

Drilling Chronological

Well Name:FEE 28-09D4 43 013 34293

Field Name:	DUCHESNE	S/T/R:	28/4S/4W	County,State:	DUCHESNE, UT
Operator:	PETROGLYPH	Location Desc:	9.7 miles SE of Duchesne, UT	District:	UTAH
Project AFE:	**42601**	AFEs Associated:			/ //

Daily Summary

Activity Date :	**5/14/2010**	Days From Spud :	71	Current Depth :	0 Ft	24 Hr. Footage Made :	0 Ft
Formation :				Weather:			
Rig Company :				Rig Name:			
Daily Cost:	$28,962	Cum DHC:		$109,472		Total Well Cost:	$100,078

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	19.00	01	Move rig to new loc. RU on Fee 28-09D4	0	0	NIH
1:00	3.00	14	NU BOP&E	0	0	NIH
4:00	2.00	15	Test BOP	0	0	NIH
Total:	24.00					

Daily Summary

Activity Date :	**5/15/2010**	Days From Spud :	72	Current Depth :	1300 Ft	24 Hr. Footage Made :	787 Ft
Formation :				Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$25,859	Cum DHC:		$135,331		Total Well Cost:	$125,937

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	3.50	61	Test upper kelly valve, safety valve, pipe & blind rams (inside & outside). Choke manifold to 250 PSI low and 3000 PSI high. Test annular to 250 PSI low and 1500 PSI high. Test csg 1500 PSI for 30 min.	0	0	NIH
9:30	5.50	06	Scribe directional tools & TIH. Tag cmt @ 420'.	0	0	1
15:00	1.00	02	Drl out cmt & float equip.	0	0	1
16:00	2.00	02	Drl F/513' to 580'. WOB 10K. RPM 40. GPM 590.	513	580	1
18:00	3.00	06	TOH to change mud mtr due to press spikes.	580	580	1
21:00	9.00	02	Drl F/580' to 1300'. WOB 15K. RPM 40. GPM 590.	580	1300	2
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
513	9:30	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	0.00	0.00	0.00	0.00	500	200	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	0.0	0		

Remarks

After drl out cmt, add DAP @ 10 sks/hr. CATPOLY - 2 cans per tour. 1 vis cup of POLYPLUS dwn DP every 3rd connection or as needed for tight hole.

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Well Name:FEE 28-09D4

Field Name:	DUCHESNE	S/T/R:	28/4S/4W	County,State:	DUCHESNE, UT
Operator:	PETROGLYPH	Location Desc:	9.7 miles SE of Duchesne, UT	District:	UTAH

Daily Summary

Activity Date :	**5/16/2010**	Days From Spud :	73	Current Depth :	2770 Ft	24 Hr. Footage Made :	1470 Ft
Formation :	TRONA			Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$33,949	Cum DHC:	$169,280	Total Well Cost:	$159,886		

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	5.00	02	Drl F/1300' to 1659'. WOB 10K. RPM 40. GPM 590	1300	1659	NIH
11:00	8.50	02	Drl F/1659' to 2135'. WOB 10K. RPM 40. GPM 590.	1659	2135	2
19:30	0.50	24	Wrk on light plant (alternator)	2135	2135	NIH
20:00	3.00	02	Drl F/2135' to 2378'. WOB 8 - 10K. RPM 40. GPM 590	2135	2378	2
23:00	0.50	06	Change rotating rubber.	2378	2378	2
23:30	6.50	02	Drl F/2378' to 2770'. WOB 8 - 10K. RPM 40. RPM 590. Drlg through 80% limestone, 10% shale, 10% pyrite. Drilling through fractures.	2378	2770	2
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
1920	15:00	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	7.00	0.00	0.00	0.00	100	40	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	8.7	0		

Remarks

DAP - 12 sks per tour. CATPOLY - add 2 cans per tour. POLYPLUS - add 1 vis cup every 3rd connection or as needed for tight hole.

Daily Summary

Activity Date :	**5/17/2010**	Days From Spud :	74	Current Depth :	4130 Ft	24 Hr. Footage Made :	1360 Ft
Formation :				Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$40,383	Cum DHC:	$209,663	Total Well Cost:	$200,269		

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	2.00	02	Drl F/2770' to 2850'. WOB 8 - 10K. RPM 40. GPM 590.	2770	2850	2
8:00	1.00	05	Circ sweep to clean hole.	2850	2850	2
9:00	1.50	02	Drl F/2850' to 2915'. WOB 10 - 20 K. RPM 40. GPM 590.	2850	2915	2
10:30	0.50	07	Rig service	2915	2915	NIH
11:00	17.50	02	Drl/slide ahead F/2915' to 4079'. WOB 10 - 20 K. RPM 40. GPM 590	2915	4079	2
4:30	0.50	07	Rig service. Grease unit, rotary table, bushings, & swivel. Change oil on DW mtrs 1 & 2.	4079	4079	NIH
5:00	1.00	02	Drl/slide ahead F/4079' to 4130'. WOB 10 - 20 K. RPM 40. GPM 590.	4079	4130	2
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
2850	8:30	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	8.00	0.00	0.00	0.00	100	40	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	8.7	0		

Remarks

DAP - 12 sks per tour. CATPOLY - 1 can per tour. POLYPLUS - add 1 vis cup every 3rd connection or as needed for tight hole. If we start losing, add 8 sks SAWDUST WALNUT every hr; it usually heals in about 10 hrs.

Well Name:FEE 28-09D4

Field Name:	DUCHESNE	S/T/R:	28/4S/4W	County,State:	DUCHESNE, UT
Operator:	PETROGLYPH	Location Desc:	9.7 miles SE of Duchesne, UT	District:	UTAH

Daily Summary

Activity Date :	**5/18/2010**	Days From Spud :	75	Current Depth :	5245 Ft	24 Hr. Footage Made :	1115 Ft
Formation :	DCBM - Douglas Creek			Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$26,457	Cum DHC:	$236,120	Total Well Cost:	$226,726		

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	11.50	02	Drl/sliding ahead F/4130' to 5024'. WOB 22. RPM 45. GPM 590.	4130	5024	2
17:30	0.50	07	Rig service. Brake inspection.	5024	5024	NIH
18:00	6.00	02	Drl/sliding ahead F/5024' to 5245'. WOB 22. RPM 45. GPM 590.	5024	5245	2
0:00	1.00	05	Mix & pmp sweeps. Circ hole clean.	5245	5245	2
1:00	1.00	06	Mix & pmp. Spot pill for trip out.	5245	5245	2
2:00	0.50	24	Rig light plant dwn.	5245	5245	NIH
2:30	3.50	23	POOH due to differential press spiking; check mtr & bit.	5245	5245	NIH
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
4290	8:30	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	8.00	0.00	0.00	0.00	100	40	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	8.7	0		

Remarks

DAP - add 6 sks per tour. CATPOLY - add 1 can per 24/hr period. Add to returns into reserve pit. POLYPLUS - add 1 vis cup dwn DP on connections as needed for tight hole. Losses - if we start losing, add 8 sks SAWDUST & 2 sks WALNUT to suction every hr. It usually heals in 10 hrs. HI-VIS SWEEP - add 15 sks gel to 50 bbl wtr., 3 sks SAWDUST, then 1/2 can POLYPLUS before pumping. WEIGHT PILL - add 90 sks GYPSUM to 60-70 bbl water in pill tank.

Well Name:FEE 28-09D4

Field Name:	DUCHESNE	S/T/R:	28/4S/4W	County,State:	DUCHESNE, UT
Operator:	PETROGLYPH	Location Desc:	9.7 miles SE of Duchesne, UT	District:	UTAH

Daily Summary

Activity Date :	**5/19/2010**	Days From Spud :	76	Current Depth :	5686 Ft	24 Hr. Footage Made :	441 Ft
Formation :	DCBM - Douglas Creek			Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$84,033	Cum DHC:	$320,153			Total Well Cost:	$310,759

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	5.00	06	TIH w/New Mtr & Bit due to press spikes.	5245	5245	3
11:00	5.00	02	Drl/sliding ahead F/5245' to 5529', WOB 15. RPM 45. GPM 590.	5245	5529	3
16:00	1.00	07	Rig service. Brake inspection. Repl alternator on light plant.	5529	5529	3
17:00	4.00	02	Drl/sliding ahead F/5529' to 5686'. WOB 15. RPM 45. GPM 590.	5529	5686	3
21:00	1.50	05	Pmp sweep. Circ hole clean. Spot pill.	5686	5686	3
22:30	3.50	06	Shuck Kelly. TOOH.	5686	5686	3
2:00	0.50	25	LD directional tools.	5686	5686	NIH
2:30	3.00	25	Scribe directional tools. PU directional tools.	5686	5686	NIH
5:30	0.50	07	Rig service. Brake inspection.	5686	5686	NIH
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
5245	8:30	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	7.50	0.00	0.00	0.00	100	40	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	8.7	0		

Remarks

DAP - add 6 sks per tour. CATPOLY - add 1 can per 24/hr period. Add to returns into reserve pit. POLYPLUS - add 1 vis cup dwn DP on connections as needed for tight hole. Losses - if we start losing, add 8 sks SAWDUST & 2 sks WALNUT to suction every hr. It usually heals in 10 hrs. HI-VIS SWEEP - add 15 sks gel to 50 bbl wtr., 3 sks SAWDUST, then 1/2 can POLYPLUS before pumping. WEIGHT PILL - add 90 sks GYPSUM to 60-70 bbl water in pill tank.

Well Name:FEE 28-09D4

Field Name:	DUCHESNE	S/T/R:	28/4S/4W	County,State:	DUCHESNE, UT
Operator:	PETROGLYPH	Location Desc:	9.7 miles SE of Duchesne, UT	District:	UTAH

Daily Summary

Activity Date :	**5/20/2010**	Days From Spud :	77	Current Depth :	5857 Ft	24 Hr. Footage Made :	171 Ft
Formation :	BCPLS - B/Castlepeak Limestone			Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$30,335	Cum DHC:		$350,488	Total Well Cost:	$341,094	

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	7.50	06	TIH. Strap in hole. Pason tally = 5635.27. Strap in Hole = 5635.27 = 1.81 Difference	5686	5686	3
13:30	0.50	05	PU Kelly. Brake circ.	5686	5686	3
14:00	9.00	02	Drl/sliding ahead F/5686' to 5857'. WOB 35K. Diff PSI 171. PSI 2427 PSI (sliding).	5686	5857	3
23:00	1.50	05	Pmp sweep. Circ hole clean. Mix & spot pill on btm.	5857	5857	3
0:30	0.50	32	Shuck Kelly.	5857	5857	3
1:00	4.00	06	TOOH to adjust mud mtr dwn F/2.60 to 2.12 bend.	5857	5857	NIH
5:00	0.50	34	Adjust mtr.	5857	5857	NIH
5:30	0.50	06	TIH w/drl string & 2.12 bend mtr.	5857	5857	3
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
5683	9:30	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	7.50	0.00	0.00	0.00	100	40	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	8.5	0		

Remarks

DAP - add 6 sks per tour. CATPOLY - add 1 can per 24 hr period; add to returns into reserve pit. POLYPLUS - add 1 vis cup dwn DP on connections as needed for tight hole.

Daily Summary

Activity Date :	**5/21/2010**	Days From Spud :	78	Current Depth :	5953 Ft	24 Hr. Footage Made :	96 Ft
Formation :	BCPLS - B/Castlepeak Limestone			Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$36,011	Cum DHC:		$386,499	Total Well Cost:	$377,105	

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	3.00	34	Change out pmp liners F 6-1/2 to 6" on #2	5857	5857	3
9:00	3.00	06	TIH w/drl string.	5857	5857	3
12:00	1.00	05	PU Kelly & brake circ.	5857	5857	3
13:00	6.50	02	Sliding ahead F/5857' to 5953'	5857	5953	3
19:30	3.50	06	Mix pill. Spot on btm. TOOH to adjust mud mtr. Only building 4.99 deg per 100'. Need 13 deg per 100' to land target.	5953	5953	3
23:00	1.00	25	LD mud mtr & PU new mud mtr.	5953	5953	3
0:00	1.50	44	MU bit. Scribe in hole w/directional tools & new mud mtr.	5953	5953	4
1:30	1.00	09	SLI 60' of new drl line.	5953	5953	4
2:30	3.50	06	TIH w/drl string.	5953	5953	4
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
5857	9:00	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	8.00	0.00	0.00	0.00	100	40	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	8.5	0		

Remarks

DAP - add 24 sks per tour. CATPOLY - add 1 can per 24 hr period; add to returns into reserve pit. POLYPLUS - add 1 vis cup dwn DP on connections as needed for tight hole.

Well Name:FEE 28-09D4

Field Name:	DUCHESNE	S/T/R:	28/4S/4W	County,State:	DUCHESNE, UT
Operator:	PETROGLYPH	Location Desc:	9.7 miles SE of Duchesne, UT	District:	UTAH

Daily Summary

Activity Date :	**5/22/2010**	Days From Spud :	79	Current Depth :	6270 Ft	24 Hr. Footage Made :	317 Ft
Formation :	BSCARB - Basal Carbonate Limestone			Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$35,768	Cum DHC:		$422,267	Total Well Cost:		$412,873

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	0.50	25	PU Kelly & brake circ.	5953	5953	4
6:30	5.50	02	Sliding ahead F/5983' to 6109'	5953	6109	4
12:00	5.50	23	Mix & pmp spot pill on btm. POOH. Mtr not building angle.	6109	6109	4
17:30	0.50	25	LD adjustable mtr. PU new mtr.	6109	6109	NIH
18:00	6.00	06	MU bit & TIH w/drl string.	6109	6109	5
0:00	0.50	05	Kelly up & brake circ.	6109	6109	5
0:30	5.50	02	Sliding ahead F/6109' to 6270'	6109	6270	5
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
6050	9:30	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	8.00	0.00	0.40	0.00	100	400	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	8.5	0		

Remarks

DAP - add 24 sks per tour. CATPOLY - add 1 can per 24 hr period; add to returns into reserve pit. POLYPLUS - add 1 vis cup dwn DP on connections as needed for tight hole.

Daily Summary

Activity Date :	**5/23/2010**	Days From Spud :	80	Current Depth :	6455 Ft	24 Hr. Footage Made :	185 Ft
Formation :				Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$60,232	Cum DHC:		$482,499	Total Well Cost:		$473,105

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	10.00	02	Sliding ahead F/6270' to 6455'. TD	6270	6455	5
16:00	0.50	05	Circ for wiper trip.	6455	6455	5
16:30	4.50	06	Short trip; 10 stands. Pmp 6 singles off btm. Wash 6 jts back to btm.	6455	6455	5
21:00	1.50	05	Pmp sweep. Circ hole clean. Mix pill.	6455	6455	5
22:30	4.50	36	Spot pill on btm. LDDP.	6455	6455	5
3:00	0.50	59	Brake Kelly.	6455	6455	5
3:30	2.50	36	LDDP directional tools.	6455	6455	5
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
6380	11:00	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	7.00	0.00	0.40	0.00	320	100	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	8.6	0		

Remarks

DAP - add 24 sks per tour. CATPOLY - add 1 can per 24 hr period; add to returns into reserve pit. POLYPLUS - add 1 vis cup dwn DP on connections as needed for tight hole.

Well Name:FEE 28-09D4

Field Name:	DUCHESNE	S/T/R:	28/4S/4W	County,State:	DUCHESNE, UT
Operator:	PETROGLYPH	Location Desc:	9.7 miles SE of Duchesne, UT	District:	UTAH

Daily Summary

Activity Date :	**5/24/2010**	Days From Spud :	81	Current Depth :	6455 Ft	24 Hr. Footage Made :	0 Ft
Formation :				Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$85,810	Cum DHC:	$568,309	Total Well Cost:	$558,915		

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	4.50	11	RU loggers. Run logs. RD logger. Triple Combo & GR to surf.	6455	6455	NIH
10:30	7.50	12	Run csg & PJSM. Run 7", 26#, L-80, LTC csg.	6455	6455	NIH
18:00	1.00	42	Undo tangled drl line on drum.	6455	6455	NIH
19:00	4.00	12	Continue to run 7", 26#, L-80, LTC csg. Washed last 4 jts dwn. Tagged btm approx 4' past TD depth 6455'.	6455	6455	NIH
23:00	5.50	12	Circ hole. RU cementers. Hold PJSM. Cmt as per Halliburton program. Stab cmt head. Cmt 7" csg w/10 bbls fresh wtr, 20 bbls super flsuh XLC, Den 10 lbs/gal. Lead, 390 sks, 132.7 bbl of Expandacem system Den, 12.5, yield 1.91 gal/sk 10.34 Tail Expandacem System 420 sks, 107.7 bbls Den 13.5, yield 1.44 gal/sk 6.78. Drop plug pmp 2% KCL. Displacement 244.9 bbls., Den 8.43. Full rtrns through job. Bump plug 500 over circ press. Hold for 5 min. Floats held 1.74 bbls back.	6455	6455	NIH
4:30	1.50	31	RD cementers. NID BOP in set csg slips.	6455	6455	NIH
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
6455	11:00	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	7.00	0.00	0.40	0.00	320	100	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp			Remarks
0	0.0	8.6	0			DAP - add 24 sks per tour.

Daily Summary

Activity Date :	**5/25/2010**	Days From Spud :	82	Current Depth :	6455 Ft	24 Hr. Footage Made :	0 Ft
Formation :	BSCARB - Basal Carbonate Limestone			Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$90,493	Cum DHC:	$658,802	Total Well Cost:	$649,408		

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	6.00	14	Cut csg. Set csg slips. NU BOP. Clean out pipe rams. X-O 4-1/2 to 3-1/2 kelly. Swap out pipe tubs from 4-1/2 to 3-1/2.	6455	6455	NIH
12:00	2.00	61	Re-test 3-1/2 pipe rams, 3-1/2 kelly, upper kelly & safety valve. Choke manifold; 250 low, 3000 high for 15 min.	6455	6455	NIH
14:00	3.00	42	Re-string blocks w/new drl line; approx. 998'.	6455	6455	NIH
17:00	1.00	25	PU DP on racks for strap to RIH.	6455	6455	NIH
18:00	1.00	25	Put BHA on catwalk. MU directional tools.	6455	6455	NIH
19:00	0.50	07	Rig service, DMMs, pmps & light plant.	6455	6455	NIH
19:30	1.00	44	Run directional tools in hole.	6455	6455	NIH
20:30	6.00	06	TIH w/3-1/2 DP.	6455	6455	NIH
2:30	0.50	05	Brake circ w/loading racks.	6455	6455	NIH
3:00	3.00	06	Load pipe racks w/HWDP & DP. Strap. Continue to TIH.	6455	6455	NIH
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
6455	11:00	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	7.00	0.00	0.40	0.00	320	100	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp			Remarks
0	0.0	8.6	0			DAP - add 24 sks per tour.

Well Name:FEE 28-09D4

Field Name:	DUCHESNE	S/T/R:	28/4S/4W	County,State:	DUCHESNE, UT
Operator:	PETROGLYPH	Location Desc:	9.7 miles SE of Duchesne, UT	District:	UTAH

Daily Summary

Activity Date :	**5/26/2010**	Days From Spud :	83	Current Depth :	7400 Ft	24 Hr. Footage Made :	945 Ft
Formation :	BSCARB - Basal Carbonate Limestone			Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$28,063	Cum DHC:	$686,865	Total Well Cost:	$677,471		

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	3.00	06	Continue TIH w/3-1/2 DP. Tag cmt at 6355'.	6455	6455	NIH
9:00	1.00	07	Rig service. Check fluids, pins & links.	6455	6455	NIH
10:00	1.50	02	Drl out cmt.	6455	6455	6
11:30	18.50	02	Drl Ahead F/ 6455' to 7400' ROT 40. WOB 20.GPM 305.	6455	7400	6
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
6455	11:00	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	7.00	0.00	0.40	0.00	1	800	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	8.4	0		

Remarks

DAP - add 12 sks per tour (1 sk/hr). CATPOLY - add 1 can every 24 hrs. POLYPLUS - add 1vis cup dwn DP every 1 to 3 connections depending on tight hole.

Daily Summary

Activity Date :	**5/27/2010**	Days From Spud :	84	Current Depth :	8898 Ft	24 Hr. Footage Made :	1498 Ft
Formation :	F3			Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$46,017	Cum DHC:	$732,882	Total Well Cost:	$723,488		

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	2.00	02	Drl Ahead F/ 7400' to 7496' WOB 12K. ROT 35. GPM 305.	7400	7496	6
8:00	0.50	05	Pump Sweep & Work pipe. Circ hole clean.	7496	7496	6
8:30	5.50	02	Drl Ahead F/ 7496' to 7847' WOB 12K. ROT 35. GPM 305.	7496	7847	6
14:00	0.50	07	Service Rig. Check fluids. Grease. Check brake pads & pins.	7847	7847	6
14:30	0.50	02	Drl Ahead F/ 7847' to 7911'. WOB 12K. ROT 35. GPM 305.	7847	7911	6
15:00	0.50	24	Stop the job. Untangle fall assist from bails due to high winds.	7911	7911	6
15:30	7.50	02	Drl Ahead F/ 7911' to 8519'. WOB 12K. ROT 35. GPM 305.	7911	8519	6
23:00	0.50	05	Work pipe & circ hole clean.	8519	8519	6
23:30	4.50	02	Drl Ahead F/ 8519' to 8834' WOB 15. ROT 35. GPM 305	8519	8834	6
4:00	0.50	05	Work pipe & circ hole clean.	8834	8834	6
4:30	0.50	02	Drl ahead F/8834' to 8898' TD. WOB 15K. ROT 35. GPM 305.	8834	8898	6
5:00	1.00	05	Pmp sweeps & work pipe. Circ hole clean for wiper trip out to shoe.	8898	8898	6
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
7528	9:00	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	7.00	0.00	0.40	0.00	100	40	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp		
0	0.0	8.4	0		

Remarks

DAP - add 12 sks per tour (1 sk/hr). CATPOLY - add 1 can every 24 hrs. POLYPLUS - add 1vis cup dwn DP every 1 to 3 connections depending on tight hole.

Well Name:FEE 28-09D4

Field Name:	DUCHESNE	S/T/R:	28/4S/4W	County,State:	DUCHESNE, UT
Operator:	PETROGLYPH	Location Desc:	9.7 miles SE of Duchesne, UT	District:	UTAH

Daily Summary

Activity Date :	**5/28/2010**	Days From Spud :	85	Current Depth :	8898 Ft	24 Hr. Footage Made :	0 Ft
Formation :	F3			Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$65,075	Cum DHC:	$797,957	Total Well Cost:	$788,563		

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	4.00	06	Wiper trip to shoe - 38 stnds.	8898	8898	6
10:00	1.50	03	Wash & ream F/8740' to 8897'	8898	8898	6
11:30	1.50	05	Pmp & circ high vis sweep around (2 circ as per mud engineer).	8898	8898	6
13:00	9.00	06	TOH w/3-1/2 DP & strap. Pason tally 8897.9'; strap out tally 8898.45'.	8898	8898	6
22:00	2.50	12	RU csg crew. Hold JHA mtg. Run csg.	8898	8898	6
0:30	4.50	06	RIH w/drop off tool. Tag btm. Drop liner & set hanger @ 5:00.	8898	8898	6
5:00	1.00	05	Circ DAP mud out of hole w/fresh wtr while RU Domn Mach for LD 3-1/2 DP. NOTE: Liner Top @ 6389'. 8898 to 7302 Perf'd pipe. 7302 to 7134 blank pipe. 7134 to 6966 perf'd pipe. 6966 to 6798 blank pipe. 6798 to 6714 perf'd pipe. 6714 to 6420 blank pipe. Used Smith drop tool to set liner. Liner wt 110K. Dropped off wt 87K. Set liner on btm @ 8897.9'	8898	8898	6
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
8897	10:00	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	7.00	0.00	0.40	0.00	100	40	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp			Remarks
0	0.0	8.4	0			None needed. TD 8897'. Building sweeps to TOOH.

Daily Summary

Activity Date :	**5/29/2010**	Days From Spud :	86	Current Depth :	8898 Ft	24 Hr. Footage Made :	0 Ft
Formation :				Weather:			
Rig Company :	Aztec Well Servicing Co., Inc.			Rig Name:	AZTEC 184		
Daily Cost:	$39,984	Cum DHC:	$837,941	Total Well Cost:	$828,547		

Operations

Start	Hrs	Code	Remarks	Start Depth	End Depth	Run
6:00	8.50	06	TOH. LD 3-1/2 DP & LD csg hanger tool.	8898	8898	NIH
14:30	0.50	01	RD LD trough. RU w/Wireline crew.	8898	8898	NIH
15:00	1.50	12	Run & set bribe plug @ 5507'	8898	8898	NIH
16:30	6.50	31	ND BOP, choke manifold & flow line. Jet & clean pits.	8898	8898	NIH
23:00	7.00	01	RD rig for 7am rig move. Rig release @ 23:00 05/29/2010.	8898	8898	NIH
Total:	24.00					

Mud Properties

Depth	Time	Wt In	Wt Out	Vis	PV	YP	Gels	FL	HTFL	FC	HTFC	Solid	Water	Oil	Sand
8898	10:00	8.34	8.34	27	1	1	10/10/0	0.0	0.0	0	0.00	1.0%	99.0%	0.0%	0.0%

MBT	pH	Pm	Pf	Mf	Cl	Ca	ES	Pom	Lime	Total Sal.	CaCl2	EDTA	O/W Ratio	Mud Loss
0.0	7.00	0.00	0.40	0.00	100	40	0	0.00	0.00	0	0	0.00		0

Water Loss	LCM	ECD	FL Temp			Remarks
0	0.0	8.4	0			None needed. TD 8897'. Building sweeps to TOOH.

Well Name:FEE 28-09D4

Field Name:	DUCHESNE	S/T/R:	28/4S/4W	County,State:	DUCHESNE, UT
Operator:	PETROGLYPH	Location Desc:	9.7 miles SE of Duchesne, UT	District:	UTAH

Formation

Formation Name	Current Well Top	Subsea Datum	Ref Well Top	Elec Top	Comments
Castle Peak Limesto	0	14	5759	0	
"B" Limestone	0	14	5204	0	
Douglas Creek	0	14	4784	0	
"X" Marker	0	14	4129	0	
Mahogany Shale	0	14	2907	0	

Casing

DateIn	Setting Depth	Jts Run	Type	Size	Weight	Grade	MINID	HoleDiam	TD
3/8/2010	513.71	11	3. Surface	9.625	36	J-55	8.921	12.25	500
Stage: 1, Tail, 0, 200, 2% calc2, 1/4#/sk Flocele, Class G, 1.15, 15.8									
5/24/2010	6485.65	144	4. Intermediate	7	26	L-80	0	8.75	6486
Stage: 1, Lead, 0, 390, Expandacem System, Expanding, 1.91, 12.5									
Stage: 1, Tail, 0, 420, Expandacem System, Expanding, 1.44, 13.5									
Stage: 1, Wash, 20, 0, SuperFlush XLC, , 0, 0									
Stage: 1, Displacement, 244.9, 0, 2% KCL, , 0, 0									
5/28/2010	8897.9	59	6. Liner	4.5	11.6	L-80	0	6.125	8898

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STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

CONFIDENTIAL

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME: N/A

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Fee 28-09D4

2. NAME OF OPERATOR: PETROGLYPH OPERATING COMPANY

9. API NUMBER: 4301334293

3. ADDRESS OF OPERATOR: PO BOX 607 CITY ROOSEVELT STATE UT ZIP 84066

PHONE NUMBER: (435) 722-2531

10. FIELD AND POOL, OR WILDCAT: DUCHESNE

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 2500' FSL 600' FEL

COUNTY: DUCHESNE

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 28 T4S R4W

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☑ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The date of first production for this well is June 15, 2010

NAME (PLEASE PRINT) Glenda Davis TITLE Office Manager

SIGNATURE Glenda Davis DATE 6/18/2010

(This space for State use only)

RECEIVED
JUN 21 2010
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

STATE

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STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ (Highlight changes) FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: FEE

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME: FEE

8. WELL NAME and NUMBER: FEE 28-09D4

9. API NUMBER: 4301334293

10 FIELD AND POOL, OR WILDCAT: DUCHESNE

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 28 4S 4W U

12. COUNTY: DUCHESNE

13. STATE: UTAH

1a. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ DRY ☐ OTHER

b. TYPE OF WORK: NEW WELL ☑ HORIZ. LATS. ☑ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

2. NAME OF OPERATOR: PETROGLYPH

3. ADDRESS OF OPERATOR: BOX 607 CITY ROOSEVELT STATE UT ZIP 84066 PHONE NUMBER: (435) 722-1531

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 2500 FSL 600 FEL
AT TOP PRODUCING INTERVAL REPORTED BELOW: 3663 FSL 1283 FEL
AT TOTAL DEPTH: ~~704~~ 803 FSL ~~2292 FEL~~ 2495 FWL

BHL reviewed by HSM

14. DATE SPUDDED: 5/15/2010
15. DATE T.D. REACHED: 5/28/2010
16. DATE COMPLETED: 8/27/2010 ABANDONED ☐ READY TO PRODUCE ☑
17. ELEVATIONS (DF, RKB, RT, GL): 6060 RKB

18. TOTAL DEPTH: MD 8,895 TVD 6,086
19. PLUG BACK T.D.: MD 0 TVD 0
20. IF MULTIPLE COMPLETIONS, HOW MANY? *
21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
SPEC DNL,CBL

23.
WAS WELL CORED? NO ☑ YES ☐ (Submit analysis)
WAS DST RUN? NO ☑ YES ☐ (Submit report)
DIRECTIONAL SURVEY? NO ☐ YES ☑ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
12.25	9.625 J-55	36	0	513		G 200	41	0	
8.750	7 L-80	26	0	6,485		G 810	240		
6.125	4.5 J55	11.6	5,638	8,895					NOT CMT'D
									DSSLs
									SWELL PKR
20	14 J55	42 CONDU	0	40		REDI			

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	5,612							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) GR. RIVER	6,990	8,386		
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)		SIZE	NO. HOLES	PERFORATION STATUS
6,990	6,992	.75	27	Open ☑ Squeezed ☐
7,347	7,349	.75	27	Open ☑ Squeezed ☐
7,660	7,662	.75	27	Open ☑ Squeezed ☐
8,016	8,018	.75	27	Open ☑ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
6990' MD-6992' MD	53,000# SAND FRAC. 1#-3# RAMP &3# W/539 BBLS 22# DELTA 140 W/1000 GALS 15%HCL
7347' MD-7349' MD	40,900# SAND FRAC. 1#-3# RAMP &3# W/474 BBLS 22# DELTA 140 W/1000 GALS 15%HCL
7660' MD-7662' MD	40,100# SAND FRAC. 1#-3# RAMP &3# W/474 BBLS 22# DELTA 140 W/1000 GALS 15%HCL

29. ENCLOSED ATTACHMENTS:

☑ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☑ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER:

30. WELL STATUS: POW

(5/2000) TIGHT HOLE

(CONTINUED ON BACK)

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31. INITIAL PRODUCTION — **INTERVAL A (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
8/27/2010		8/28/2010		24			51	24	95	ROD PUMP
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:
42	20	32	33.00	1	471		51	24	95	OPEN

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

USED FOR FUEL

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.

34. FORMATION (Log) MARKERS:

Name	Top (Measured Depth)
MAHOGANY	2,870
GARDEN GULCH	3,642
B MARKER	4,080
X MARKER	4,592
DOUGLAS CREEK	4,732
B LIME	4,998
CASTLE PEAK	5,758
BASAL CARBONATE	6,158

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) BOYD COOK TITLE RIG REP

SIGNATURE Boyd Cook DATE 9/27/10

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

TIGHT HOLE

PETROGLYPH

FEE 28-09D4 COMPLETION

CONTINUATION OF OF PERF. INTERVALS AND FRACS.

FORM 8 SEC. 27

GREEN RIVER PERFS. CONT:

8384'-8386' MD=27 HOLES .75" OPEN

FORM 8 SEC. 28

FRACS. CONT:

DEPTH INTERVAL:

8016' MD-8018' MD=NO FRAC.

8384' MD-8386' MD=40,900# SAND FRAC. 1#-3# RAMP &3# W/472 BBLS 22# DELTA 140 W/1000 GALS 15%HCL

FORM 8 SEC. 24 CONT:

LATERAL LINER HANGAR TOP @5638' MD (847 OVER LAP IN 7" {7" SHOE @ 6485' MD})

LATERAL CONSISTS OF 4 ½" J-55 11.6# WITH FIVE=5 ½" SWELL PKRS. AT 6821' MD AND 7177' MD AND 7533' MD AND 7847' MD AND 8212' MD

DSSLs AT 6990'-6992' MD (6163' TVD) AND 7347'-7349' MD (6143' TVD) AND 7660'-7662' MD (6129' TVD)AND 8016'-8018' MD (6116' TVD)AND POV 8384'-8386' MD (6103' TVD)

PLEASE SEE ATTACHED DOCUMENTATION

TIGHT HOLE

28-09D4

HALLIBURTON

COMPANY	LEASE	WELL #	RIG CONTRACTOR
PETROGLYPH	FEE 0	28 09D4	0
COMPANY REP	COUNTY/PARISH	STATE	DATE
0	0	0	June 28,2009
HALLIBURTON REP	SERVICE CENTER	SERVICE ORDER NUMBER	
0	0	0	

	SIZE & WEIGHT		GRADE	THREAD			CAPACITY	TOP @	BOTTOM @
CASING	7	26	L-80	LT & C			0.0371	0	6455
LINER UPPER									
LINER LOWER	4 1/2	11.6	N-80	STL			0.01420		8895.00
								Pumping Displacements	BBLS
Land String 1	3 1/2	13.3	S 135	NC38(IF)	LS Wt:	#N/A	0.0054336	Drill Pipe Capacity	#N/A
Land String 2					LS Wt:			Liner Capacity	46.4
Land String 3					LS Wt:			Shoe Track Capacity	0.6
								Total Volume to Land Plug	#N/A
Mud Wt:	8.5				Buoyancy Fact:		0.8700	Block Wt:	0.00
Make Up Thread Loss			in.					Lap = 225'	

# Jnts run	Jnt. #	Thread-on Length	Liner Strap Length	Made-up Length		Shoe To RT	Thread / Hanger to RT	Total depth RKB - TOP	Comments	Hook Load K lbs.	Cap. BBLS
(Shoe Depth)							(Shoe Depth)	8895.0			
	Shoe	-	1.23	1.23		1.23	STL	8893.8		0.0	0.0
#1 Shoe Jt.	1	-	42.10	42.10		43.33	STL	8851.7		0.4	0.6
1	0	-	0.00	0.00		43.33	STL	8851.7		0.4	0.6
0	0	-	0.00	0.00		43.33	STL	8851.7		0.4	0.6
0	0	-	0.00	0.00		43.33	STL	8851.7		0.4	0.6
#3 Float Collar	FC&LC	-	2.00	2.00		45.33	STL	8849.7		0.5	0.6
4	2	-	42.10	42.10		87.43	STL	8807.6		0.9	1.2
5	3	-	42.10	42.10		129.53	STL	8765.5		1.3	1.8
6	4	-	42.10	42.10		171.63	STL	8723.4		1.7	2.4
7	5	-	42.10	42.10		213.73	STL	8681.3		2.2	3.0
8	6	-	42.10	42.10		255.83	STL	8639.2		2.6	3.6
9	7	-	42.10	42.10		297.93	STL	8597.1		3.0	4.2
10	8	-	42.10	42.10		340.03	STL	8555.0		3.4	4.8
11	9	-	42.10	42.10		382.13	STL	8512.9		3.9	5.4
12	10	-	42.10	42.10		424.23	STL	8470.8		4.3	6.0
13	11	-	42.10	42.10		466.33	STL	8428.7		4.7	6.6
14	12	-	42.10	42.10		508.43	STL	8386.6		5.1	7.2
15	POV	-	2.63	2.63		511.06	STL	8383.9	Ports 8384.7'	5.2	7.3
16	13	-	42.10	42.10		553.16	STL	8341.8		5.6	7.9
17	14	-	42.10	42.10		595.26	STL	8299.7		6.0	8.5
18	15	-	42.10	42.10		637.36	STL	8257.6		6.4	10.0
19	16	-	45.20	45.20		682.56	STL	8212.4		6.9	10.6
20	Swellpacker	-	16.61	16.61		699.17	STL	8195.8	8203' -> 8210'	7.1	10.9
21	17	-	45.10	45.10		744.27	STL	8150.7		7.5	11.5
22	18	-	45.20	45.20		789.47	STL	8105.5		8.0	12.2
23	19	-	45.20	45.20		834.67	STL	8060.3		8.4	12.8
24	20	-	42.10	42.10		876.77	STL	8018.2		8.8	13.4
25	DSS #2	-	2.55	2.55		879.32	STL	8015.7	Ports 8016.5'	8.9	13.4
26	21	-	42.10	42.10		921.42	STL	7973.6		9.3	14.0
27	22	-	42.10	42.10		963.52	STL	7931.5		9.7	14.6
28	23	-	42.10	42.10		1005.62	STL	7889.4		10.1	15.2
29	24	-	42.10	42.10		1047.72	STL	7847.3		10.6	15.8
30	Swellpacker	-	16.61	16.61		1064.33	STL	7830.7	7836' -> 7845'	10.7	16.1
31	25	-	42.10	42.10		1106.43	STL	7788.6		11.2	16.7
32	26	-	42.10	42.10		1148.53	STL	7746.5		11.6	17.3
33	27	-	42.10	42.10		1190.63	STL	7704.4		12.0	17.9
34	28	-	42.10	42.10		1232.73	STL	7662.3		12.4	18.5
35	DSS #3	-	2.55	2.55		1235.28	STL	7659.7	Ports 7660.5'	12.5	18.5
36	29	-	42.10	42.10		1277.38	STL	7617.6		12.9	19.1
37	30	-	42.10	42.10		1319.48	STL	7575.5		13.3	19.7
38	31	-	42.10	42.10		1361.58	STL	7533.4		13.7	20.3
39	Swellpacker	-	16.61	16.61		1378.19	STL	7516.8	7524' -> 7531'	13.9	20.5
40	32	-	42.10	42.10		1420.29	STL	7474.7		14.3	21.1
41	33	-	42.10	42.10		1462.39	STL	7432.6		14.8	21.7
42	34	-	42.10	42.10		1504.49	STL	7390.5		15.2	22.3
43	35	-	42.10	42.10		1546.59	STL	7348.4		15.6	22.9
44	DSS #4	-	2.55	2.55		1549.14	STL	7345.9	Ports 7346.7'	15.6	22.9
45	36	-	42.10	42.10		1591.24	STL	7303.8		16.1	23.5
46	37	-	42.10	42.10		1633.34	STL	7261.7		16.5	24.1
47	38	-	42.10	42.10		1675.44	STL	7219.6		16.9	24.7
48	39	-	42.10	42.10		1717.54	STL	7177.5		17.3	25.3

TIGHT HOLE

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49	Swellpacker	-	16.61	16.61	1734.15	STL	7160.9	7168' -> 7175'	17.5	25.6
50	40	-	42.10	42.10	1776.25	STL	7118.8		17.9	26.2
51	41	-	42.10	42.10	1818.35	STL	7076.7		18.4	26.8
52	42	-	42.10	42.10	1860.45	STL	7034.6		18.8	27.4
53	43	-	42.10	42.10	1902.55	STL	6992.5		19.2	28.0
54	DSS #5	-	2.55	2.55	1905.10	STL	6989.9	Ports 6990.7'	19.2	28.0
55	44	-	42.10	42.10	1947.20	STL	6947.8		19.7	28.6
56	45	-	42.10	42.10	1989.30	STL	6905.7		20.1	29.2
57	46	-	42.10	42.10	2031.40	STL	6863.6		20.5	29.8
58	47	-	42.10	42.10	2073.50	STL	6821.5		20.9	30.4
59	Swellpacker	-	16.61	16.61	2090.11	STL	6804.9	6812' -> 6819'	21.1	30.6
60	48	-	42.10	42.10	2132.21	STL	6762.8		21.5	31.2
61	49	-	41.90	41.90	2174.11	STL	6720.9		21.9	31.8
62	50	-	42.10	42.10	2216.21	STL	6678.8		22.4	32.4
63	51	-	42.10	42.10	2258.31	STL	6636.7		22.8	33.0
64	52	-	42.10	42.10	2300.41	STL	6594.6		23.2	33.6
65	53	-	42.10	42.10	2342.51	STL	6552.5		23.6	34.2
66	54	-	41.90	41.90	2384.41	STL	6510.6		24.1	34.8
67	55	-	42.10	42.10	2426.51	STL	6468.5		24.5	35.4
68	56	-	42.10	42.10	2468.61	STL	6426.4		24.9	36.0
69	57	-	42.10	42.10	2510.71	STL	6384.3		25.3	36.6
70	58	-	42.10	42.10	2552.81	STL	6342.2		25.8	37.2
71	59	-	42.10	42.10	2594.91	STL	6300.1		26.2	37.8
72	60	-	42.10	42.10	2637.01	STL	6258.0		26.6	38.4
73	61	-	42.10	42.10	2679.11	STL	6215.9		27.0	39.0
74	62	-	42.10	42.10	2721.21	STL	6173.8		27.5	39.6
75	63	-	42.10	42.10	2763.31	STL	6131.7		27.9	40.2
76	64	-	42.10	42.10	2805.41	STL	6089.6		28.3	40.8
77	65	-	42.10	42.10	2847.51	STL	6047.5		28.7	41.4
78	66	-	42.10	42.10	2889.61	STL	6005.4		29.2	42.0
79	67	-	42.10	42.10	2931.71	STL	5963.3		29.6	42.6
80	68	-	42.10	42.10	2973.81	STL	5921.2		30.0	43.2
81	69	-	42.10	42.10	3015.91	STL	5879.1		30.4	43.8
82	70	-	42.10	42.10	3058.01	STL	5837.0		30.9	44.4
83	71	-	42.10	42.10	3100.11	STL	5794.9		31.3	45.0
84	72	-	42.10	42.10	3142.21	STL	5752.8		31.7	45.6
85	73	-	42.10	42.10	3184.31	STL	5710.7		32.1	46.2
86	74	-	42.10	42.10	3226.41	STL	5668.6		32.6	46.8
87	74	OUT	42.10	0.00	3226.41	STL	5668.6		32.6	46.8
88	74	OUT	42.10	0.00	3226.41	STL	5668.6		32.6	46.8
89	74	OUT	42.10	0.00	3226.41	STL	5668.6		32.6	46.8
XO / VAM top X LTC				**1.34**	3227.75		5667.3		32.6	46.8
Elastomers to bottom of Hanger Jt				**7.28**	3235.03		5660.0	Elastomer Location	32.6	46.9
Top of Hanger to Elastomers				**8.94**	3243.97		**5651.0**	TBR Top	32.7	47.0
Setting Tool (above hgr)				**12.89**	3256.86	12.89	5638.14		33.3	47.1
Pup joint		**Weight**		**0.00**	3256.86	12.89	5638.14		#N/A	47.1
90	1	**#N/A**		#N/A	#N/A	#N/A	#N/A		#N/A	#N/A
IN ON CMT STAND				**#N/A**	**#N/A**	**#N/A**	**#N/A**		#N/A	#N/A

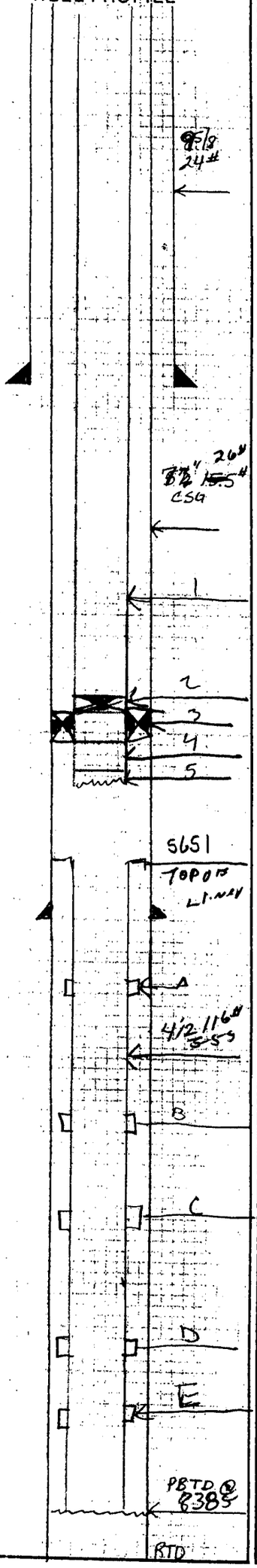
Total Liner Joints	Total Pipe Stands	Total Drill Pipe in Hole	Total String Length	Total Drill Pipe Length	Height Above Rotary
0	1	#N/A	#N/A	#N/A	#N/A

*If negative - need additional pipe

TIGHT HOLE

CONFI

WELL PROFILE



OPERATOR PETROGLYPH

WELL # Fee 28-09D4

FIELD Duchesne

COUNTY Duchesne

STATE Utah

DATE 8-27-10

☑ NEW COMPLETION ☐ WORKOVER

	Casing	Liner	Tubing	
SIZE	9 5/8	7"	4 1/2	2 7/8
WEIGHT	?	26	11.6	6.5
GRADE	?	L80	J-55	J-55
THREAD	?	LTAC	8 TDC	8rd
DEPTH	?	6458	5651 / 8477	5611

ITEM NO.	EQUIPMENT AND SERVICES		
	KB	14.00	
1	180 Jts 2 7/8 6.5 J-55 8rd	5562.53	5576.53
2	2 7/8 PSN (2.28 ID)	1.10	5577.63
3	7" TAC w/45 Shear	2.80	5580.43
4	1 2 7/8 6.5 J-55 8rd	30.85	5611.28
5	2 7/8 N/C w/ P.N	.45	5611.73
	Stretch 12 1/4" For 10K		
	1 1/2 x 22 P.R.W/ Liner		
	2 x 7/8 & 6 x 7/8		
	75 7/8 Grade D slick		
	141 - 3/4 Grade D Slick		
	4 - 3/4 Grade D Guided 4/per Every 4th		
	1 - 3/4 Grade D Guided 5/per Above pump		
	2 1/2 X 1 1/2" X 4 X 17 RBTC CDI # PG 2		
	w/ SAND SCREEN		
			TVD
A	sleeve - 6990-92	27 HIS M.D.	6163'
B	sleeve - 7347-49	27 HIS M.D	6143'
C	sleeve - 7660-62	27 HIS M.D.	6129'
D	sleeve - 8016-18	27 HIS M.D	6116'
E	P.O.V - 8384-86	27 HIS M.D	6103'

COMMENTS:

826' overlap

TIGHT HOLE

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PREPARED BY	OFFICE	PHONE
M.K. Lowery		

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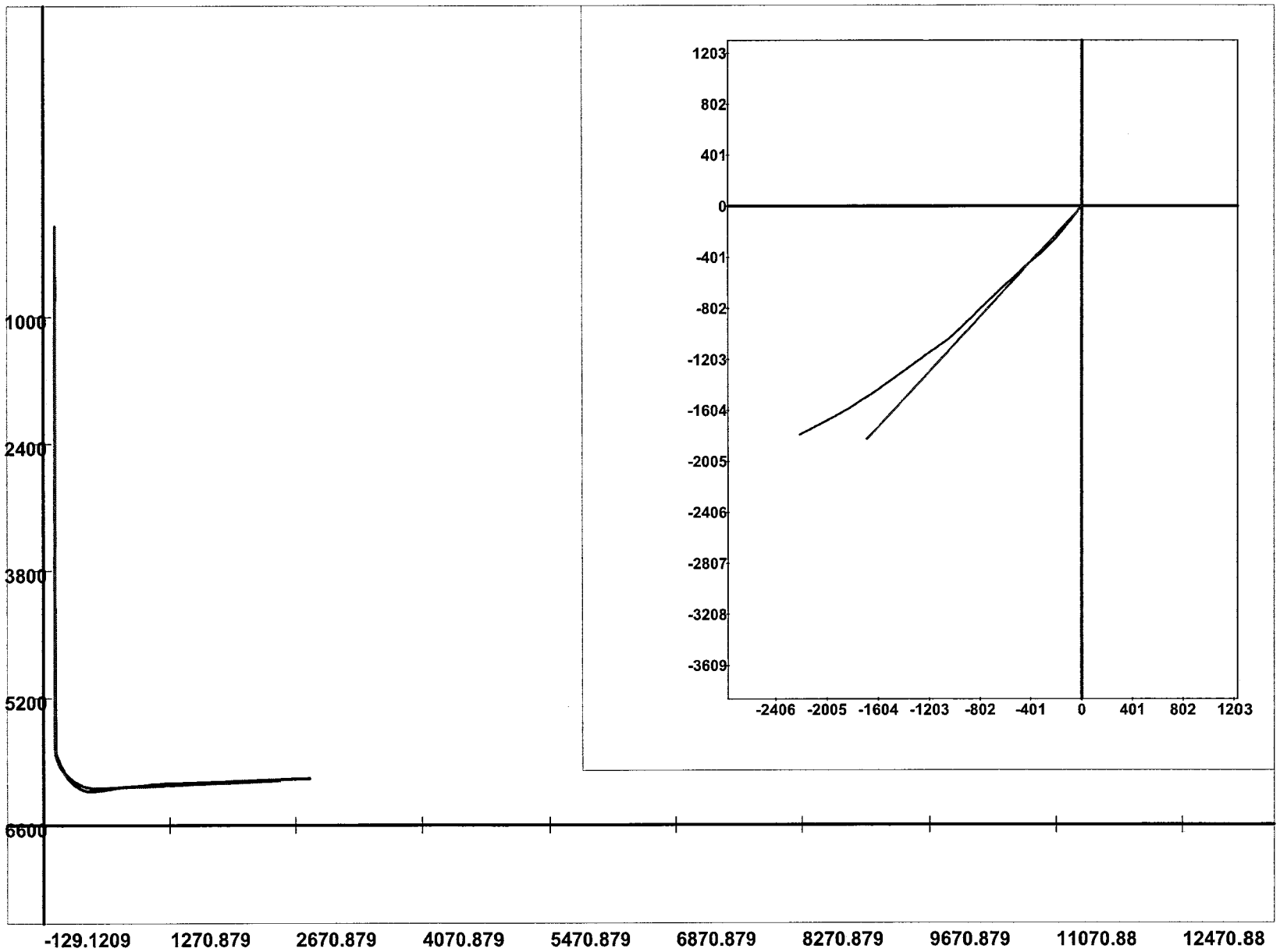
MOUNTAIN STATES OIL TOOLS

Brighton, CO Farmington, NM Vernal, UT Cortez, CO Sterling, CO



FEE 28.09D4

TIGHT HOLE

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Job Number: 42HEF1005399	State/Country: UTAH/USA
Company: PETROGLYPH	Declination: 11.64
Lease/Well: FEE 28-09D4	Grid: []
Location: []	File name: D:\DOCUME~1\USER\DESKTOP\FEE28-~1\28-09D4.SVY
Rig Name: AZTEC 184	Date/Time: 29-May-10 / 05:36
RKB: 6061	Curve Name: AS DRILLED
G.L. or M.S.L.: 6047	

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TIGHT HOLE

Scientific Drilling

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 222.76
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
548.00	.53	160.18	547.99	-2.38	.86	1.17	2.53	160.18	.10
640.00	.26	89.69	639.99	-2.78	1.21	1.22	3.04	156.46	.55
731.00	.09	73.78	730.99	-2.76	1.49	1.02	3.14	151.70	.19
822.00	.18	5.31	821.99	-2.60	1.57	.84	3.04	148.89	.19
913.00	.26	.83	912.99	-2.25	1.59	.58	2.75	144.84	.09
1004.00	.53	33.17	1003.99	-1.69	1.82	.01	2.48	132.94	.37
1097.00	.26	18.32	1096.98	-1.13	2.12	-.61	2.40	118.10	.31
1189.00	.35	55.59	1188.98	-.78	2.42	-1.07	2.54	107.78	.23
1282.00	.26	349.49	1281.98	-.41	2.61	-1.48	2.65	98.86	.37
1377.00	.44	344.22	1376.98	.16	2.48	-1.79	2.48	86.40	.19
1471.00	.53	336.66	1470.98	.90	2.20	-2.16	2.38	67.75	.12
1564.00	.79	301.15	1563.97	1.63	1.49	-2.20	2.20	42.37	.51

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
1658.00	.53	244.02	1657.97	1.77	.54	-1.67	1.85	16.95	.71
1752.00	.88	226.80	1751.96	1.09	-.38	-.54	1.15	340.92	.43
1845.00	.44	220.12	1844.95	.33	-1.13	.53	1.17	286.17	.48
1940.00	.26	56.73	1939.95	.17	-1.18	.68	1.19	278.00	.73
2034.00	.44	46.80	2033.95	.53	-.74	.11	.91	305.60	.20
2127.00	.18	19.55	2126.95	.91	-.43	-.38	1.01	334.68	.31
2221.00	.18	281.38	2220.95	1.08	-.53	-.44	1.20	334.01	.29
2315.00	.26	209.39	2314.95	.92	-.78	-.15	1.21	319.96	.28
2407.00	.44	157.54	2406.95	.42	-.74	.20	.85	299.20	.38
2503.00	.79	113.42	2502.94	-.19	.00	.14	.19	178.70	.59
2598.00	.88	121.06	2597.93	-.82	1.23	-.23	1.48	123.84	.15
2694.00	.26	65.96	2693.93	-1.12	2.06	-.58	2.34	118.45	.79
2789.00	.86	6.89	2788.92	-.32	2.34	-1.36	2.36	97.80	.80
2883.00	.88	1.36	2882.91	1.10	2.44	-2.47	2.68	65.75	.09
2979.00	.90	338.82	2978.90	2.54	2.19	-3.35	3.35	40.75	.36
3073.00	.97	275.31	3072.89	3.30	1.13	-3.19	3.49	18.90	1.05
3169.00	1.23	258.00	3168.87	3.16	-.69	-1.86	3.24	347.77	.44
3261.00	1.23	241.74	3260.85	2.49	-2.52	-.12	3.54	314.65	.38
3357.00	1.49	186.37	3356.83	.76	-3.57	1.86	3.65	282.07	1.34
3452.00	1.58	146.02	3451.80	-1.55	-2.97	3.16	3.35	242.45	1.12
3546.00	2.11	91.01	3545.75	-2.66	-.52	2.30	2.71	191.04	1.88
3638.00	2.46	66.75	3637.68	-1.91	2.99	-.63	3.55	122.52	1.11
3733.00	.09	249.65	3732.65	-1.13	4.79	-2.43	4.92	103.23	2.68
3829.00	.88	310.20	3828.65	-.68	4.16	-2.33	4.21	99.25	.87
3923.00	1.32	302.56	3922.63	.37	2.70	-2.10	2.72	82.16	.49
4016.00	1.23	280.59	4015.61	1.13	.81	-1.38	1.39	35.65	.53
4111.00	.88	248.42	4110.60	1.05	-.87	-.18	1.36	320.38	.71
4201.00	1.06	247.10	4200.58	.47	-2.28	1.20	2.33	281.70	.20
4296.00	.62	182.24	4295.57	-.38	-3.11	2.39	3.13	262.96	1.03
4391.00	1.32	128.10	4390.56	-1.57	-2.27	2.69	2.76	235.26	1.14
4486.00	.88	130.91	4485.54	-2.73	-.86	2.58	2.86	197.42	.47
4581.00	.44	196.21	4580.54	-3.55	-.41	2.88	3.58	186.51	.84
4676.00	.44	298.51	4675.54	-3.73	-.83	3.30	3.82	192.52	.72
4771.00	.62	306.43	4770.53	-3.25	-1.56	3.45	3.61	205.67	.20

TIGHT HOLE

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
4866.00	.97	248.07	4865.52	-3.25	-2.72	4.23	4.24	219.98	.88
4961.00	.88	247.27	4960.51	-3.83	-4.14	5.62	5.64	227.25	.10
5056.00	.35	346.94	5055.51	-3.83	-4.88	6.12	6.20	231.89	1.05
5150.00	.62	32.56	5149.50	-3.12	-4.67	5.46	5.62	236.27	.48
5245.00	.26	340.97	5244.50	-2.48	-4.46	4.85	5.11	240.93	.53
5339.00	1.52	269.77	5338.49	-2.28	-5.78	5.60	6.22	248.43	1.55
5434.00	1.85	258.70	5433.45	-2.59	-8.54	7.70	8.93	253.13	.49
5530.00	1.76	132.05	5529.43	-3.88	-8.97	8.94	9.77	246.60	3.36
5623.00	.97	74.04	5622.40	-4.62	-7.15	8.25	8.51	237.12	1.61
5666.00	1.32	32.12	5665.40	-4.10	-6.54	7.45	7.72	237.89	2.05
5697.00	1.67	22.89	5696.38	-3.38	-6.17	6.67	7.04	241.27	1.37
5729.00	.79	226.01	5728.38	-3.11	-6.15	6.46	6.89	243.19	7.55
5761.00	5.19	217.92	5760.33	-4.40	-7.20	8.12	8.44	238.55	13.78
5793.00	10.11	222.14	5792.04	-7.63	-9.97	12.37	12.56	232.59	15.46
5824.00	15.04	219.41	5822.28	-12.76	-14.36	19.11	19.21	228.37	16.01
5856.00	19.52	217.92	5852.83	-20.19	-20.28	28.59	28.61	225.13	14.07
5888.00	22.77	215.72	5882.67	-29.43	-27.18	40.07	40.07	222.72	10.45
5919.00	24.27	214.76	5911.10	-39.54	-34.32	52.33	52.36	220.96	4.99
5950.00	25.15	217.39	5939.26	-50.01	-41.95	65.20	65.27	219.99	4.54
5982.00	27.17	214.14	5967.98	-61.46	-50.18	79.19	79.34	219.23	7.74
6014.00	28.93	215.19	5996.22	-73.83	-58.74	94.09	94.35	218.51	5.71
6045.00	30.51	217.83	6023.14	-86.18	-67.89	109.37	109.71	218.23	6.62
6075.00	32.18	220.64	6048.77	-98.26	-77.77	124.94	125.31	218.36	7.40
6107.00	34.73	220.38	6075.46	-111.67	-89.22	142.56	142.94	218.63	7.98
6138.00	39.57	222.40	6100.16	-125.69	-101.61	161.27	161.63	218.95	16.10
6170.00	45.20	219.59	6123.79	-141.98	-115.73	182.82	183.18	219.18	18.56
6201.00	49.86	214.58	6144.73	-160.23	-129.48	205.55	206.01	218.94	19.18
6233.00	51.35	220.20	6165.04	-179.86	-144.49	230.15	230.71	218.78	14.35
6265.00	56.89	219.94	6183.79	-199.69	-161.18	256.04	256.62	218.91	17.32
6296.00	64.28	220.56	6199.01	-220.29	-178.62	283.00	283.60	219.04	23.90
6328.00	71.05	221.87	6211.16	-242.53	-198.11	312.57	313.16	219.24	21.49
6359.00	78.44	221.43	6219.31	-264.87	-217.97	342.45	343.02	219.45	23.88
6391.00	85.56	222.93	6223.76	-288.33	-239.24	374.12	374.66	219.68	22.73
6482.00	87.81	229.52	6221.04	-351.11	-304.74	464.69	464.92	220.96	15.34

TIGHT HOLE

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
6514.00	97.69	228.91	6216.71	-371.83	-328.75	496.19	496.32	221.48	1.97
6547.00	97.96	228.73	6212.22	-393.35	-353.35	528.70	528.76	221.93	.98
6579.00	97.78	228.29	6207.83	-414.35	-377.10	560.24	560.26	222.31	1.47
6610.00	98.40	228.47	6203.47	-434.74	-400.04	590.79	590.79	222.62	2.08
6643.00	98.66	228.64	6198.58	-456.34	-424.51	623.25	623.26	222.93	.94
6674.00	98.75	228.11	6193.89	-476.69	-447.41	653.75	653.77	223.19	1.71
6707.00	97.66	227.30	6189.18	-498.67	-471.57	686.29	686.33	223.40	4.10
6739.00	97.87	228.03	6184.85	-520.02	-495.01	717.88	717.95	223.59	2.35
6770.00	97.08	227.67	6180.82	-540.65	-517.80	748.49	748.61	223.76	2.80
6802.00	95.06	227.32	6177.44	-562.15	-541.25	780.20	780.36	223.92	6.41
6834.00	93.47	228.11	6175.06	-583.62	-564.86	812.00	812.21	224.06	5.55
6865.00	93.74	227.59	6173.11	-604.38	-587.80	842.81	843.08	224.20	1.89
6898.00	94.09	227.76	6170.85	-626.55	-612.14	875.61	875.94	224.33	1.18
6930.00	94.26	227.15	6168.52	-648.13	-635.65	907.42	907.81	224.44	1.97
6961.00	93.65	226.80	6166.39	-669.23	-658.26	938.26	938.71	224.53	2.27
6993.00	96.20	227.41	6163.64	-690.93	-681.62	970.05	970.56	224.61	8.19
7025.00	96.46	226.01	6160.11	-712.74	-704.77	1001.78	1002.34	224.68	4.42
7057.00	98.13	227.24	6156.05	-734.53	-727.84	1033.45	1034.06	224.74	6.46
7088.00	95.76	226.62	6152.30	-755.55	-750.31	1064.14	1064.81	224.80	7.90
7120.00	93.83	225.92	6149.62	-777.59	-773.36	1095.96	1096.69	224.84	6.41
7153.00	93.21	224.95	6147.60	-800.70	-796.82	1128.86	1129.62	224.86	3.48
7185.00	92.51	224.95	6146.00	-823.32	-819.40	1160.80	1161.58	224.86	2.19
7216.00	92.33	224.86	6144.69	-845.26	-841.27	1191.75	1192.56	224.86	.65
7248.00	91.80	225.48	6143.54	-867.80	-863.94	1223.70	1224.53	224.87	2.55
7281.00	90.75	226.53	6142.80	-890.72	-887.68	1256.64	1257.52	224.90	4.50
7312.00	88.46	226.27	6143.02	-912.10	-910.13	1287.57	1288.51	224.94	7.43
7344.00	89.78	226.18	6143.51	-934.23	-933.23	1319.51	1320.49	224.97	4.13
7376.00	91.71	226.18	6143.09	-956.38	-956.31	1351.45	1352.48	225.00	6.03
7408.00	94.26	227.94	6141.43	-978.15	-979.71	1383.31	1384.41	225.05	9.68
7440.00	94.35	228.73	6139.03	-999.36	-1003.54	1415.07	1416.27	225.12	2.48
7471.00	94.18	229.08	6136.72	-1019.68	-1026.84	1445.81	1447.12	225.20	1.25
7503.00	91.89	230.66	6135.03	-1040.28	-1051.27	1477.51	1478.97	225.30	8.69
7536.00	89.69	232.68	6134.58	-1060.12	-1076.37	1509.12	1510.77	225.44	9.33
7567.00	89.96	234.00	6134.68	-1079.23	-1102.04	1540.58	1542.47	225.60	4.21

TIGHT HOLE

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
7599.00	93.83	235.06	6133.62	-1097.78	-1128.08	1571.88	1574.07	225.78	12.54
7631.00	93.56	235.94	6131.56	-1115.87	-1154.40	1603.03	1605.55	225.97	2.87
7662.00	93.12	235.85	6129.76	-1133.22	-1180.02	1633.16	1636.04	226.16	1.45
7694.00	91.80	234.88	6128.38	-1151.39	-1206.32	1664.36	1667.61	226.33	5.12
7726.00	91.45	234.35	6127.47	-1169.91	-1232.40	1695.67	1699.27	226.49	1.98
7759.00	92.95	234.18	6126.21	-1189.17	-1259.17	1727.98	1731.95	226.64	4.57
7791.00	91.89	233.56	6124.86	-1208.02	-1284.99	1759.35	1763.67	226.77	3.84
7823.00	91.89	233.74	6123.80	-1226.98	-1310.75	1790.76	1795.42	226.89	.56
7855.00	91.71	233.74	6122.80	-1245.90	-1336.54	1822.16	1827.18	227.01	.56
7887.00	92.68	234.44	6121.57	-1264.65	-1362.44	1853.51	1858.92	227.13	3.74
7918.00	92.15	233.92	6120.26	-1282.78	-1387.55	1883.87	1889.66	227.25	2.39
7951.00	92.42	234.00	6118.95	-1302.18	-1414.22	1916.22	1922.41	227.36	.85
7983.00	92.77	235.06	6117.50	-1320.73	-1440.25	1947.51	1954.13	227.48	3.49
8015.00	92.24	234.27	6116.10	-1339.22	-1466.33	1978.79	1985.86	227.59	2.97
8046.00	91.28	233.21	6115.15	-1357.54	-1491.31	2009.21	2016.66	227.69	4.61
8079.00	91.89	234.00	6114.24	-1377.11	-1517.87	2041.61	2049.48	227.78	3.02
8111.00	91.98	234.44	6113.16	-1395.81	-1543.81	2072.95	2081.26	227.88	1.40
8143.00	91.98	234.79	6112.05	-1414.33	-1569.89	2104.25	2113.03	227.98	1.09
8175.00	92.15	235.23	6110.90	-1432.67	-1596.09	2135.50	2144.77	228.09	1.47
8207.00	91.80	235.59	6109.79	-1450.83	-1622.41	2166.70	2176.49	228.20	1.57
8239.00	91.80	235.76	6108.79	-1468.86	-1648.83	2197.88	2208.21	228.30	.53
8271.00	92.07	236.11	6107.71	-1486.77	-1675.32	2229.02	2239.91	228.41	1.38
8302.00	92.07	236.64	6106.59	-1503.93	-1701.12	2259.13	2270.60	228.52	1.71
8334.00	91.71	236.38	6105.53	-1521.58	-1727.79	2290.19	2302.27	228.63	1.39
8367.00	91.54	236.82	6104.60	-1539.74	-1755.33	2322.22	2334.94	228.74	1.43
8399.00	91.98	237.61	6103.62	-1557.06	-1782.22	2353.20	2366.58	228.86	2.82
8431.00	91.54	237.61	6102.63	-1574.19	-1809.23	2384.11	2398.20	228.97	1.37
8463.00	92.42	240.24	6101.53	-1590.69	-1836.62	2414.83	2429.71	229.10	8.66
8494.00	92.59	240.51	6100.17	-1606.00	-1863.54	2444.34	2460.09	229.25	1.03
8526.00	91.19	239.63	6099.12	-1621.96	-1891.25	2474.88	2491.51	229.38	5.17
8557.00	92.15	240.95	6098.21	-1637.32	-1918.17	2504.42	2521.94	229.52	5.26
8589.00	92.86	242.53	6096.81	-1652.45	-1946.32	2534.65	2553.19	229.67	5.41
8621.00	92.51	242.53	6095.31	-1667.20	-1974.69	2564.74	2584.36	229.83	1.09
8653.00	91.98	242.18	6094.06	-1682.04	-2003.01	2594.86	2615.59	229.98	1.98

TIGHT HOLE

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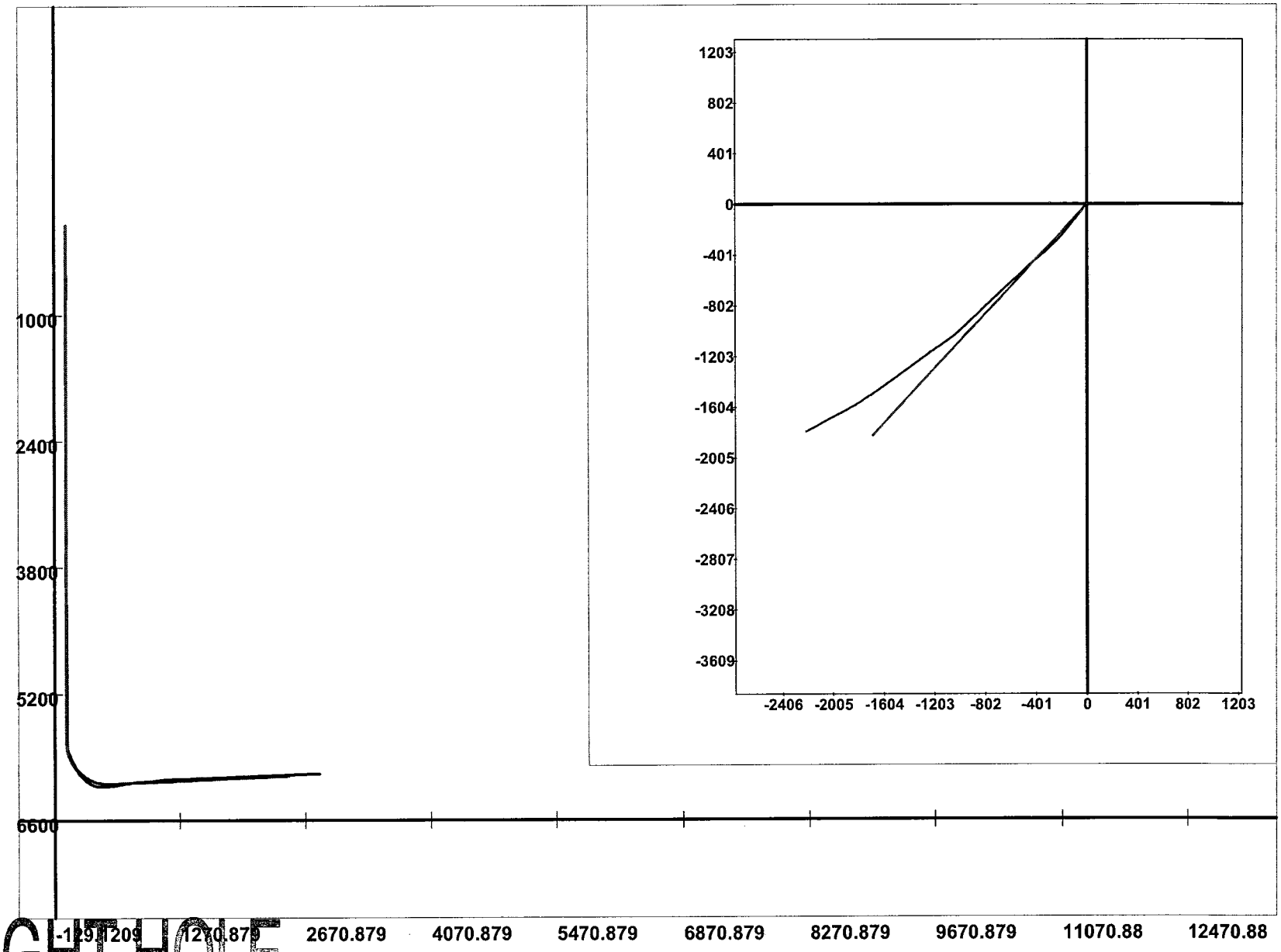
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
8684.00	92.15	242.26	6092.94	-1696.47	-2030.42	2624.07	2645.87	230.12	.61
8716.00	92.24	242.44	6091.72	-1711.31	-2058.74	2654.19	2677.13	230.27	.63
8746.00	92.68	242.35	6090.43	-1725.20	-2085.30	2682.42	2706.44	230.40	1.50
8778.00	91.89	241.56	6089.16	-1740.24	-2113.52	2712.62	2737.77	230.53	3.49
8810.00	92.07	241.74	6088.05	-1755.42	-2141.67	2742.88	2769.16	230.66	.80
8842.00	92.07	242.09	6086.89	-1770.48	-2169.88	2773.09	2800.53	230.79	1.09
Projection to bit									
8898.00	92.07	242.09	6084.87	-1796.67	-2219.34	2825.90	2855.43	231.01	.00

TIGHT HOLE

CONFIDENTIAL

AS DRILLED File: D:\DOCUME~1\USER\DESKTOP\FEE28-~1\28-09D4.SVY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TIGHT HOLE

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/28/2010			6455
6AM DEPTH	7440	24 HOUR FOOTAGE	985	

GAS HIGH:	684u
GAS LOW:	10u
TRIP GAS:	248u
CONNECTION GAS:	N/A
BACKGROUND GAS:	20-38u
SHOWS:	7034-7050' 684u

DOL: LT BRN-TN, MICXL, WXY, HD, TT, FOSS FRAGS, YELLO WAX W/BRT BLU FLOR, NO CUT, LS: DK GY, MICXL, ARG, CALC FL FRAC, TT.

FORMATIONS:	DEPTHS (MD)	ASSOCIATED SHOWS:
BASAL CARB.	6166' EST. 6121' TVD	NONE
F-3 DOL	6276' EST. 6193' TVD	NONE

CURRENT FORMATION: BASAL CARBONATE

SAMPLE DESCRIPTION: LS- DK BRN-BLK, MICXL-CRPXL, ARG, TT, CALC FL FRAC, FRAC POR, NSFOC. LS- DK BRN-GY, MICXL-VFXL, V ARG, SH: DK GY, OCC TN, SLTY, BLKY, SLI CALC, NSFOC. LS: GY TO LT GY, MICXL, HD, ARG, DOLIC, CALC FL FRACS, TR DK CHT, TR FOSS FRAGS, TT, NSFOC.

COMMENTS:

CURRENTLY DRILLING AHEAD 100 FT./HR +. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH 7.0, CL 100, @ 6380'.

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DIV. OF OIL, GAS & MINING

TIGHT HOLE

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/26/2010		6455
6AM DEPTH	6455	24 HOUR FOOTAGE	0

GAS HIGH:	N/A
GAS LOW:	N/A
TRIP GAS:	N/A
CONNECTION GAS:	N/A
BACKGROUND GAS:	N/A
SHOWS:	NONE

FORMATIONS:	DEPTHS (MD)		ASSOCIATED SHOWS:
BASAL CARB.	6166'	EST.	NONE
	6121' TVD		
F-3 DOL	6276'	EST.	NONE
	6193' TVD		

CURRENT FORMATION: LOWER BASAL CARBONATE

SAMPLE DESCRIPTION: LS- DK BRN-BLK, MICXL-CRPXL, ARG, TT, CALC FL FRAC, FRAC POR, NSFOC. LS- DK BRN-GY, MICXL-VFXL, V ARG, SH: DK GY, OCC TN, SLTY, BLKY, SLI CALC, NSFOC.

COMMENTS:

CURRENTLY RAN CASING AND CEMENTED/WAITING ON CEMENT/NIPPLE DOWN BOP. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 7.0, CL. 100. @ 6380'.

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/27/2010		6455
6AM DEPTH	6455	24 HOUR FOOTAGE	0

GAS HIGH:	N/A
GAS LOW:	N/A
TRIP GAS:	N/A
CONNECTION GAS:	N/A
BACKGROUND GAS:	N/A
SHOWS:	NONE

FORMATIONS:	DEPTHS (MD)		ASSOCIATED SHOWS:
BASAL CARB.	6166'	EST.	NONE
	6121' TVD		
F-3 DOL	6276'	EST.	NONE
	6193' TVD		

CURRENT FORMATION: LOWER BASAL CARBONATE

SAMPLE DESCRIPTION: LS- DK BRN-BLK, MICXL-CRPXL, ARG, TT, CALC FL FRAC, FRAC POR, NSFOC. LS- DK BRN-GY, MICXL-VFXL, V ARG, SH: DK GY, OCC TN, SLTY, BLKY, SLI CALC, NSFOC.

COMMENTS:

CURRENTLY TRIPPING IN HOLE WITH 3 1/2 " DRILL PIPE. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 7.0, CL. 100. @ 6380'.

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/25/2010		6271
6AM DEPTH	6455	24 HOUR FOOTAGE	184

GAS HIGH:	191u
GAS LOW:	8u
TRIP GAS:	SHORT TRIP 341u
CONNECTION GAS:	80-135u
BACKGROUND GAS:	40-79u
SHOWS:	NONE

FORMATIONS:	DEPTHS (MD)		ASSOCIATED SHOWS:
BASAL CARB.	6166'	EST.	NONE
	6121' TVD		
F-3 DOL	6276'	EST.	NONE
	6193' TVD		

CURRENT FORMATION: LOWER BASAL CARBONATE

SAMPLE DESCRIPTION: LS- DK BRN-BLK, MICXL-CRPXL, ARG, TT, CALC FL FRAC, FRAC POR, NSFOC. LS- DK BRN-GY, MICXL-VFXL, V ARG, SH: DK GY, OCC TN, SLTY, BLKY, SLI CALC, NSFOC.

COMMENTS:

CURRENTLY TRIPPING OUT TO RUN CASING. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 7.0, CL. 100. @ 6380'.

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/24/2010			5984
6AM DEPTH		6275	24 HOUR FOOTAGE	291

GAS HIGH:	1039u
GAS LOW:	8u
TRIP GAS:	1458/1081
CONNECTION GAS:	80-120u
BACKGROUND GAS:	32-65u
SHOWS:	6043-6046' 181u

SS- WH, BRN, S &P, F GR, SBANG-RD, W SRTD, SLTY, CALC, FRM-HD, TT-FR POR, DUL YEL FLOR, SLO STRM CUT.

FORMATIONS:	DEPTHS (MD)	ASSOCIATED SHOWS:

CURRENT FORMATION: BASAL CARBONATE

SAMPLE DESCRIPTION: LS- DK BRN-BLK, MICXL-CRPXL, ARG, TT, FRAC POR, NSFOC. LS- DK BRN-GY, MICXL-VFXL, V ARG, SH: DK GY, OCC TN, SLTY, BLKY, SLI CALC, NSFOC.

COMMENTS:

CURRENTLY DRILLING AHEAD 20-65'/HR. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 8.0, CL. 100. @ 6050'.

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/23/2010			5857
6AM DEPTH		5984	24 HOUR FOOTAGE	127

GAS HIGH:	1039u
GAS LOW:	8u
TRIP GAS:	1039u
CONNECTION GAS:	80-105u
BACKGROUND GAS:	25-36u
SHOWS:	NONE

FORMATIONS:	DEPTHS (MD)	ASSOCIATED SHOWS:
TRONA	2720 EST.	NONE
MAHOGANY SH.	2916 EST.	NONE
"X" MARKER	4609' EST	NONE
Douglas Creek	4744' EST	VERY POOR CUT/NO GAS

CURRENT FORMATION: CASTLE PEAK

SAMPLE DESCRIPTION: LS- TAN, BRN, DK BRN, MICXL, ARG-SLTY, TT, BRI YELL FLOR, NO CUT. SS: OFF WH, GY-BRN, S&P, GRAINSTN, F-VF GN, OCC M GN, RD, SPH, MOD SRT, V CALC CMT, PALE GRN MIN FLOR, NO CUT, SH: LT GY, TN, HD, PLTY.

COMMENTS:

CURRENTLY TRIPPING IN HOLE, ADJUSTED/NEW MUD MOTOR. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 8.0, @ 5857'.

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/22/2010			5683
6AM DEPTH		5857	24 HOUR FOOTAGE	174

GAS HIGH:	1000u
GAS LOW:	8u
TRIP GAS:	1000u
CONNECTION GAS:	50-95u
BACKGROUND GAS:	30-55u
SHOWS:	NONE

FORMATIONS:	DEPTHS (MD)	ASSOCIATED SHOWS:
TRONA	2720 EST.	NONE
MAHOGANY SH.	2916 EST.	NONE
"X" MARKER	4609' EST	NONE
Douglas Creek	4744' EST	VERY POOR CUT/NO GAS

CURRENT FORMATION: CASTLE PEAK

SAMPLE DESCRIPTION: LS- TAN, BRN, DK BRN, MICXL, ARG-SLTY, TT, BRI YELL FLOR, NO CUT. SS: OFF WH, GY-BRN, S&P, GRAINSTN, F-VF GN, OCC M GN, RD, SPH, MOD SRT, V CALC CMT, PALE GRN MIN FLOR, NO CUT, SH: LT GY, TN, HD, PLTY.

COMMENTS:

CURRENTLY TRIPPING OUT OF HOLE TO ADJUST MUD MOTOR. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 7.5, CL.100.

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/21/2010			5245
6AM DEPTH		5683	24 HOUR FOOTAGE	438

GAS HIGH:	2666U
GAS LOW:	8u
TRIP GAS:	2666U
CONNECTION GAS:	105-145u
BACKGROUND GAS:	30-80u
SHOWS:	

FORMATIONS:	DEPTHS (MD)	ASSOCIATED SHOWS:
TRONA	2720 EST.	NONE
MAHOGANY SH.	2916 EST.	NONE
"X" MARKER	4609' EST	NONE
Douglas Creek	4744' EST	VERY POOR CUT/NO GAS

CURRENT FORMATION: Douglas Creek

SAMPLE DESCRIPTION: SS- DK BRN-BRN, VF GR, SBANG-SBRD, W SRTD, CALC, V SLTY, FRM-HD, TT, V LTL YEL FLOR, V POOR SLO BLED CUT. SH: DK GY, OCC TN, HD, PLTY, CARB, IMBED PYR, NON CALC, SLTST, DK GY-BRN, SBRD, W SRT, WK CALC CMT, NSFOC.

COMMENTS:

CURRENTLY TRIPPING OUT OF HOLE TO PICK UP DIR. TOOLS. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 7.5, CL.100.

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/20/2010			4150
6AM DEPTH	5245	24 HOUR FOOTAGE		1095

GAS HIGH:	267u
GAS LOW:	15u
TRIP GAS:	N/A
CONNECTION GAS:	85-135u
BACKGROUND GAS:	30-80u
SHOWS:	4744-4752'(QUES.) 4608-4624'(QUES.)

LS- DK BRN, BRN, MICXL, SLTY, TT, FRAC POR, V LTL DULL YEL FLOR, V FAINT SLO CUT. LS- DK BRN-LT BRN, MICXL, OOL, SLTY, TT, FRAC POR, V DULL ORNG FLOR, V P SLO CUT.

FORMATIONS:	DEPTHS (MD)	ASSOCIATED SHOWS:
TRONA	2720 EST.	NONE
MAHOGANY SH.	2916 EST.	NONE
"X" MARKER	4609' EST	NONE
Douglas Creek	4744' EST	VERY POOR CUT/NO GAS

CURRENT FORMATION: Douglas Creek

SAMPLE DESCRIPTION: SH- GY-M GY, OCC LT GY, BLKY-PLTY, SDY, CALC, FRM-HD. SS- LT GY-WH, CRM, VF-F GR, SBANG-SBRD, W SRTD, SLTY, CALC, FRM-HD, TT, NSFOC. LS- DK BRN, BRN, MICXL, SLTY, TT, FRAC POR, V LTL DULL YEL FLOR, V FAINT SLO CUT.

COMMENTS:

CURRENTLY TRIPPING FOR NEW BIT/MOTOR AND DIR. TOOLS. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 8.0, CL.100.

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/19/2010		2769
6AM DEPTH	4140	24 HOUR FOOTAGE	1371

GAS HIGH:	260u
GAS LOW:	12u
TRIP GAS:	N/A
CONNECTION GAS:	85-135u
BACKGROUND GAS:	33-62u
SHOWS:	

FORMATIONS:	DEPTHS (MD)	ASSOCIATED SHOWS:
TRONA	2720 EST.	NONE
MAHOGANY SH.	2916 EST.	NONE

CURRENT FORMATION: MAHOGANY SH.

SAMPLE DESCRIPTION: SH- GY-M GY, BLKY-PLTY, SBWXY, CALC, FRM-HD. LS- WH, BUFF, TAN, MICXL, SLTY-SDY, TT, FRAC, DULL FLOR, NO CUT. LS: BRN, TN, BUFF, VF GN TO MICXL, HD, WXY, PALE YELLO MIN FLOR, NO CUT, SH: DK GY-GY, LT GY, HD, PLTY, IMBED PYR.

COMMENTS:

CURRENTLY DRILLING AHEAD 60-100+ FT./HR. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 8.0, CL.100.

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/18/2010			1314
6AM DEPTH		2750	24 HOUR FOOTAGE	1436

GAS HIGH:	658u	
GAS LOW:	12u	
TRIP GAS:	N/A	
CONNECTION GAS:	130-175U	
BACKGROUND GAS:	32-65u	
SHOWS:		

FORMATIONS:	DEPTHS (MD)	ASSOCIATED SHOWS:

CURRENT FORMATION: TRONA

SAMPLE DESCRIPTION: SH: DK BRN, SLI HD, PLTY, F LAMS, CALC, DOL, SS: GY- BRN, S&P, M-F GN, W SRT, ANG, HD, CALC MTX, PALE ORNG FLOR, NO CUT.

COMMENTS:

CURRENTLY DRILLING AHEAD 60-100+ FT./HR. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 7.0, CL. 500.

TOOKE ROCKIES, WEATHERFORD SLS
GAS, SHOWS AND GEOLOGIC REPORT
Fee 28-09D4

DATE:	5/29/2010		7400
6AM DEPTH	8897	24 HOUR FOOTAGE	1497

GAS HIGH:	2040u
GAS LOW:	28u
TRIP GAS:	N/A
CONNECTION GAS:	200-600u
BACKGROUND GAS:	60-85u
SHOWS:	8794-8800' 2040u

DOL- MICXL-CRPXL, SM OOL, TT, FRAC, NSFOC. W/ PET WAX, YEL FLOR. P CUT. LS: TAN. MICXL. ARG-GRDG TO MUDSTN. FRAC. TT. DK CHT, ABT PET WAX, NO CUT, DOL- DK BRN, OCC DK GY, MICXL-CRPXL, TT, NSFOC.

FORMATIONS:	DEPTHS (MD)	ASSOCIATED SHOWS:
BASAL CARB.	6166' EST. 6121' TVD	NONE
F-3 DOL	6276' EST. 6193' TVD	NONE

CURRENT FORMATION:	F-3 DOLOMITE
SAMPLE DESCRIPTION:	DOL- MICXL-CRPXL, SM OOL, TT, FRAC, NSFOC. W/ PET WAX, YEL FLOR, P CUT. LS- TAN, BUFF, MICXL, ARG-GRDG TO MUDSTN, FRAC, TT, NSFOC. W/ PET WAX.

COMMENTS:

CURRENTLY TD AT 8897 FT. AT 5:13AM. MUD = WT. 8.3, VIS. 27, PV. 1, YP. 1, pH. 7.0, CL. 100.