

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input checked="" type="checkbox"/>
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Helper State 33-4
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT HELPER
4. TYPE OF WELL Gas Well Coalbed Methane Well: YES						5. UNIT or COMMUNITIZATION AGREEMENT NAME
6. NAME OF OPERATOR ANADARKO PETROLEUM CORP						7. OPERATOR PHONE 307-752-1169
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217						9. OPERATOR E-MAIL Laura.Gianakos@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ST UT ML-45804			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>
20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	2601 FSL 2162 FEL	NWSE	4	14.0 S	10.0 E	S
Top of Uppermost Producing Zone	2601 FSL 2162 FEL	NWSE	4	14.0 S	10.0 E	S
At Total Depth	2601 FSL 2162 FEL	NWSE	4	14.0 S	10.0 E	S
21. COUNTY CARBON			22. DISTANCE TO NEAREST LEASE LINE (Feet) 2162		23. NUMBER OF ACRES IN DRILLING UNIT 80	
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1200		26. PROPOSED DEPTH MD: 2579 TVD: 2579	
27. ELEVATION - GROUND LEVEL 6144			28. BOND NUMBER 22013542		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE City of Price	
ATTACHMENTS						
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES						
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER			<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN			
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)			<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER			
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)			<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP			
NAME Kathy Schneebeck-Dulnoan			TITLE Staff Regulatory Analyst		PHONE 720 929-6007	
SIGNATURE			DATE 08/25/2010		EMAIL GNBRegulatory@anadarko.com	
API NUMBER ASSIGNED 43007500730000			 Permit Manager			

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	5.5	0	2579		
Pipe	Grade	Length	Weight			
	Grade J-55 ST&C	2579	15.5			

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	11	8.625	0	258		
Pipe	Grade	Length	Weight			
	Grade J-55 ST&C	258	24.0			

**Helper Plan of Development
Carbon County, Utah**

OPERATOR: Anadarko Petroleum Corporation

MASTER DRILLING PROGNOSIS PRODUCTION WELLS

WELL LIST:	Sec/T/R	Quarter/Quarter	Footages		Total Measured Depth
Helper State 12-3	3 T14S R10E	SWNW	2113' FNL	524' FWL	2312
Helper State 32-3	3 T14S R10E	SWNE	2066' FNL	1947' FEL	2506
Helper State 32-36	36 T13S R10E	SWNE	2142' FNL	2345' FEL	3215
Helper State 33-4	4 T14S R10E	NWSE	2601' FSL	2162' FEL	2579
Helper State 43-2	2 T14S R10E	NESE	1506' FSL	480' FEL	2136
Vea 32-32	32 T13S R10E	SWNE	1798' FNL	1886' FEL	3225

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

<u>Formation</u>	<u>Shallowest Depth</u>	<u>Deepest Depth</u>
	<u>Measured</u>	<u>Measured</u>
Ferron	1836	2925
TD	2136	3225

2. ESTIMATED DEPTH OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:

Primary Objective: Ferron Methane Gas

Several coal seams may be tested for gas producing formations to total depth. All shallow water zones will be protected with casing and cement. Cement will be brought to surface to isolate formations

The casing and cementing programs shall be conducted as approved to protect and/or isolate all usable water zones and any prospectively valuable deposits of minerals. All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.

3. MINIMUM BOP REQUIREMENTS: (Refer to attached schematics)

- a) The BOPE shall be closed whenever the well is unattended.
- b) The BOPE shall be pressure tested when initially installed, whenever any seal subject to pressure testing is broken, after repairs, or every 30 days.
- c) Kerr-McGee shall notify the UDOGM-Price office 24 hours prior to the BOPE test.
- d) All BOPE shall meet or exceed the requirements of a 2M system as set forth in Onshore Order No. 2.
- e) An accumulator unit will be used that has sufficient capacity to open the hydraulically-controlled choke line valve (if so equipped), close all rams plus the annular preventer and retain 200 psi above precharge or the closing manifold without the use of the closing pumps. The accumulator unit will be located at the master accumulator and on the rig floor. Hydraulic controls will be located at the master accumulator and on the rig floor. Manual controls (hand wheels) will also be installed on the blind and pipe rams
- f) Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or 70 percent of internal yield pressure of casing if BOP stack is not isolated from casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer.
- g) Annular type preventers shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.
- h) Accessories to BOP's include upper and lower Kelly cock valves with handles and floor safety valve, drill string BOP.

4. SUPPLEMENTARY INFORMATION:

The primary objective of this project is to drill, stimulate and produce coalbed methane gas from the coal seams of the Mesa Verde Group Formations.

Kerr-McGee proposes to test the coal formations. Stimulation of the perforated coal seams will be done by hydraulic fracturing. Fresh water, gelled water, and/or foam fracturing techniques will be used.

**Helper Plan of Development
Carbon County, Utah
OPERATOR: Anadarko Petroleum Corporation**

5. CASING PROGRAM:

Hole Size	Casing Size	Weight	Grade	Joint	Depth Set	New/Used	Collapse	Burst	Tension
17 1/2"	13 3/8"	48	H-40	ST&C	0-35'	New	740	1730	322M
11"	8 5/8"	24	J-55	ST&C	0-225 to 375'	New	1370	2950	244M
7 7/8"	5 1/2"	15.5	J-55	ST&C	0-TD	New	4040	4810	202M

Surface Casing:

- a) $Burst = 0.052 * MW * TVD(shoe)$
 $= 0.052 * 10.0 \text{ ppg} * 375'$
 $= 195 \text{ psi}$
 Safety Factor = Rating/Burst
 $= 2950/195$
 $= 15.1$

- b) $Collapse = [0.052 * MW * TVD(shoe)] - [Gas Gradient * TVD]$
 $= [0.052 * 10.0 \text{ ppg} * 375'] - [0.1 * 375']$
 $= 158 \text{ psi}$
 Safety Factor = Rating/Collapse
 $= 1370/158$
 $= 8.7$

- c) $Tension = Weight * TVD * [1 - (MW/65.5\text{ppg})]$
 $= 24 * 375' * [1 - 10.0/65.5]$
 $= 7,626 \text{ lbs.}$
 Safety Factor = Rating/Tension
 $= 244,000/7,626$
 $= 32$

Surface casing shall have centralizers on the bottom 3 joints of the casing, starting with the shoe joint (minimum of 4 centralizers.)

Production Casing:

- a) $Burst = 0.052 * 13 \text{ ppg} * 3345'$
 $= 2261 \text{ psi}$
 Safety Factor = Rating/Burst
 $= 4810/2261$
 $= 2.1$

- b) $Collapse = [0.052 * 13 \text{ ppg} * 3345' - [0.1 \text{ psi/ft} * 3345']]$
 $= 1927 \text{ psi}$
 Safety Factor = Rating/Collapse
 $= 2950/1927$
 $= 1.5$

- c) $Tension Weight = 15.5 \text{ lbs/ft} * 3345' * [1 - (13 \text{ ppg}/65.5 \text{ ppg})]$
 $= 41,557 \text{ lbs}$
 Safety Factor = Rating/Tension
 $= 202,000/41,557$
 $= 4.9$

6. MUD PROGRAM:

Kerr-McGee intends to drill the surface casing setting depth using air. Therefore, Kerr-McGee requests a variance from Onshore Order 2 in regards to the 100 foot blooie line. When drilling the surface hole no gas will be encountered and a BOP system will not be used. The length of the blooie line will be sufficient to reach the middle of the reserve pit. Since no gas will be encountered we will not have an ignition device. In the event that gas is encountered, then a continuous ignition system will be installed and utilized on remaining and subsequent wells drilled

**Helper Plan of Development
Carbon County, Utah
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Air flow line is 6" Schedule 80 pipe that runs 90 degrees from the well bore to the reserve pit. The last 7' of flow line is 14" pipe with three, 45 degree, 8" Schedule 80 pipe to disperse cuttings to reserve pit. Dust suppression system is used by water injection to flow line. There is no gas ignition in place

Location and capacity of equipment is located on site map provided and made an attachment to this plan. Kerr-McGee will use whip checks on all compressor equipment and hoses. There are several fire extinguishers placed on all equipment as well as up to date safety training and paper work

While drilling with air, Kerr-McGee will maintain sufficient mud and weight materials to kill the water flow gas production if necessary. These materials will not be pre-mixed, but the ability to mix and pump will be location.

Should water be used to drill through the surface casing setting depth, only fresh water will be used from a source listed in the MSUP.

Drilling of through production casing setting depth will be done with drilling mud as the circulation media. A fresh water, polymer, gel drilling mud will be used and visual monitoring will be done upon mudding up to total depth. The anticipated mud weight will be between 8.5 - 13 ppg. Sufficient quantities of lost circulation material and barite will be available at the well site at all times for the purpose of assuring well

A mud test shall be performed at least once every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

7. CEMENTING PROGRAM:

The following is the proposed procedure for cementing the 8 5/8" surface pipe and 5 1/2" long string

8 5/8" Surface Casing:

Lead: Type III Cement with 0.25#/sk celloflake and 2% CaCl₂, mixed at 15.8 ppg, 1.15 cuft/sk yield with 100% excess.

The surface casing shall be cemented back to surface. In the event cement does not circulate to surface or fall back of the cement column occurs, remedial cementing shall be done to cement the casing back to surface

5 1/2" Production Casing:

Lead: Type III Cement with 2% CaCl₂, 0.2% CFR, 0.3% CFL-3 and .5#/sk cello-flake, mixed at 12.5 ppg, 2.04 cuft/sk yield.

Tail: Type III with 2% CaCl₂, 0.2% CFR, 0.3% CFL-3 and .5#/sk cello-flake, mixed at 15.8 ppg, 1.15 cuft/sk yield.

Volumes calculated to circulate cement from TD to surface.

8. LOGGING PROGRAM

Well completion and stimulation procedures will be determined following the evaluation of the drilling results and open hole logs. A Sundry Notice will be submitted for approval outlining the planned completion procedure at that time.

Cores: None

DSTs: None

Logs:		<u>From</u>	<u>To</u>
	GR	TD	Surface
	Resistivity	TD	Surface Casing
	Neutron-Density-Cal	TD	Surface Casing
	High Res Pass	TBD	TBD

**Helper Plan of Development
Carbon County, Utah
OPERATOR: Anadarko Petroleum Corporation**

9. PRESSURE DATA, POTENTIAL HAZARDS

Bottom hole pressures anticipated at 800-1000 psi
There is no history of hydrogen sulfide gas in the area and none is anticipated.

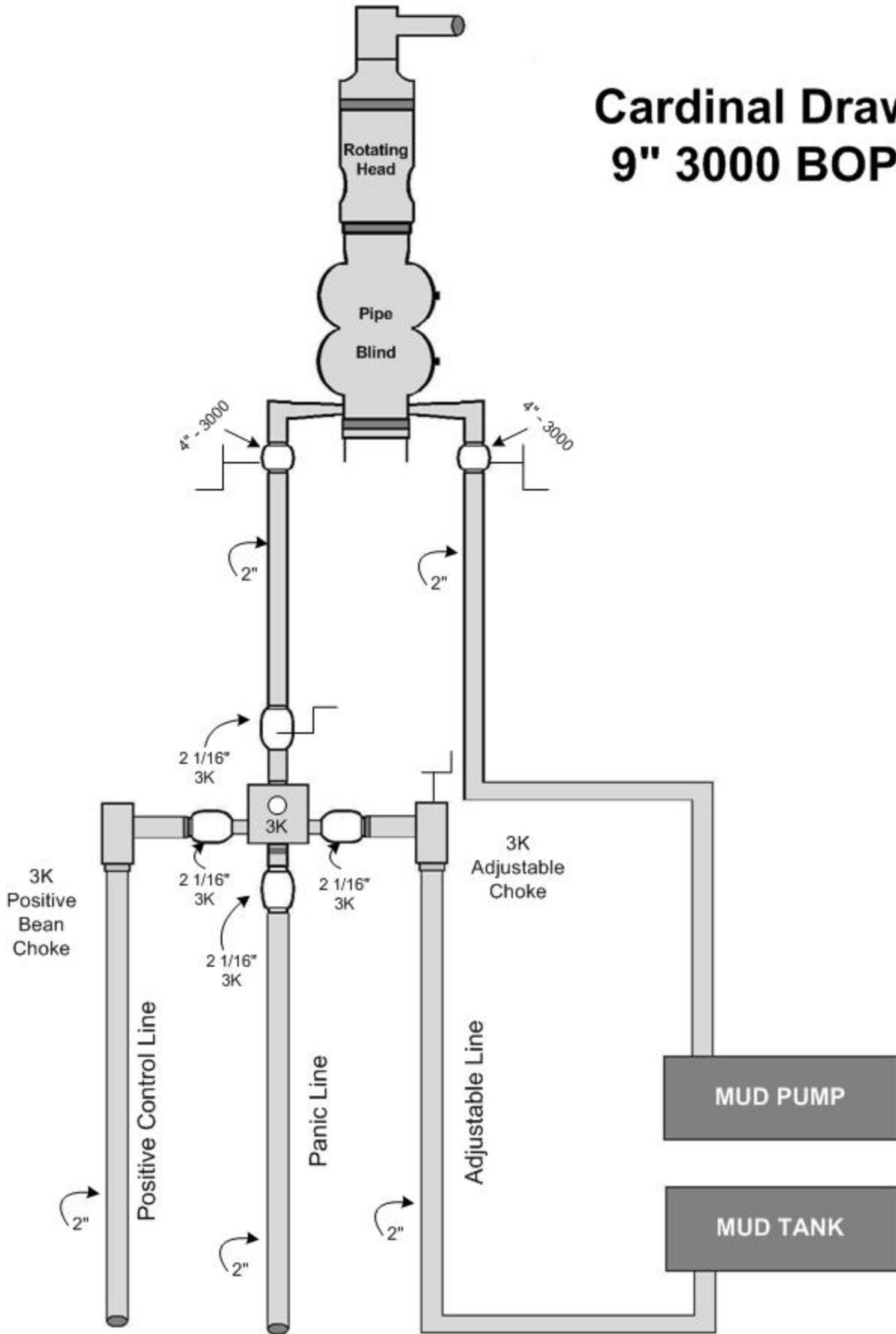
10. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

- a) Anticipated Days:
- | | |
|------------------|------------------------------|
| Drilling Days: | Approximately 4 Days/Well |
| Completion Days: | Approximately 2 Days/Well |
| Testing Days: | Approximately 7-14 Days/Well |
- b) Notification of Operations:
- | | |
|---------------------------------------|---------------------------------------|
| Main Address: | Mailing Address: |
| Utah Division of Oil, Gas, and Mining | Utah Division of Oil, Gas, and Mining |
| 1594 West North Temple, Suite 1210 | PO Box 145801 |
| Salt Lake City, UT 84116 | Salt Lake City, UT 84114-5801 |
| Main: 801-538-5340 | |
| Fax: 801-359-3940 | |

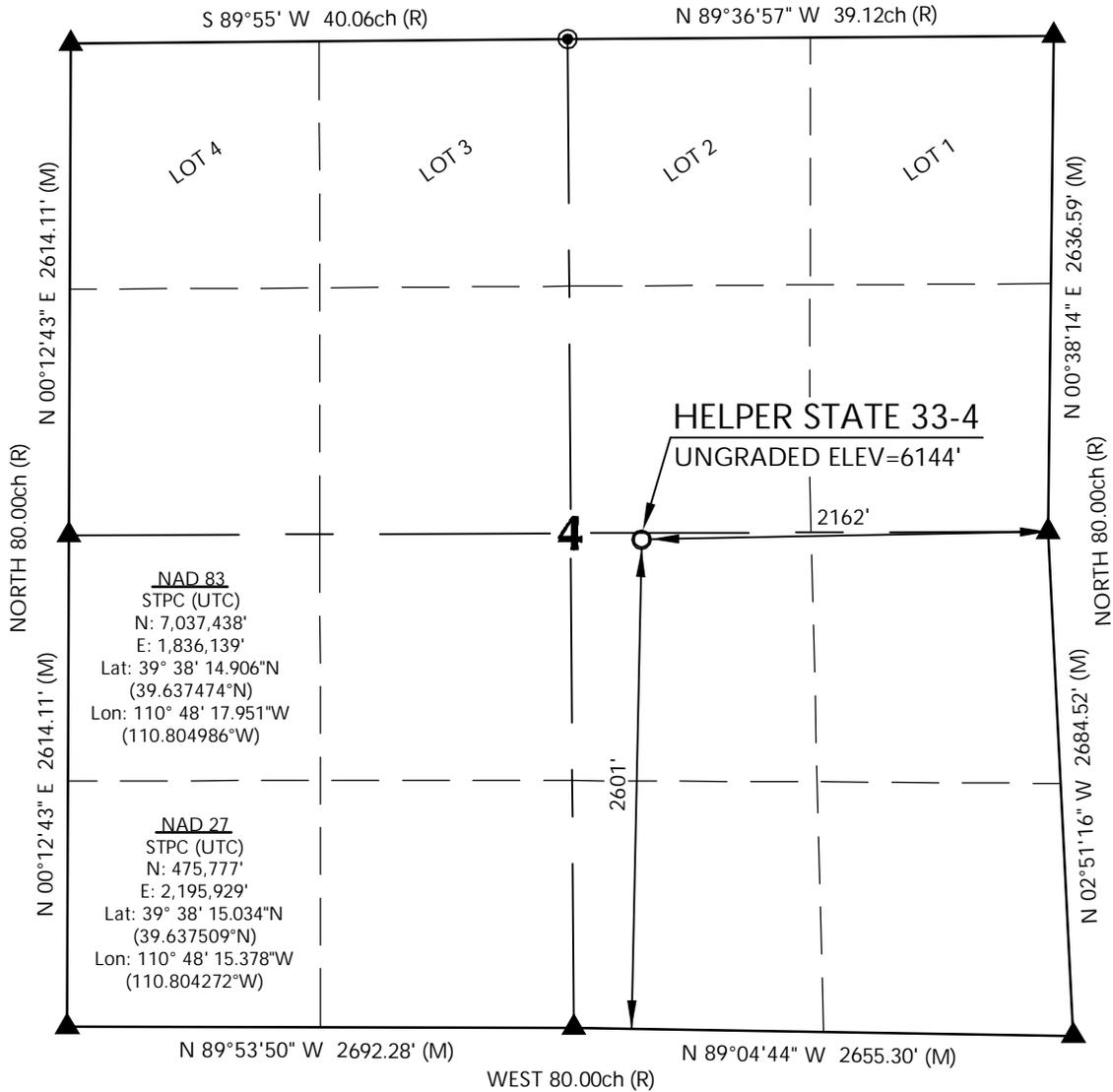
Helper Plan of Development
Carbon County, Utah
OPERATOR: Anadarko Petroleum Corporation

PROPOSED WELL	<u>8-5/8" 24# CASING</u>		<u>5-1/2" 15.5# CASING</u>		Top of Cement	Top of Tail	<u>Cement (sacks)</u>	
	<u>SETTING DEPTH-KB</u>	<u>Cement (Sacks)</u>	<u>SETTING DEPTH-KB</u>	<u>Ferron Depth</u>			<u>Production Lead</u>	<u>Production Tail</u>
1 Helper State 12-3	231'	102	2,312'	2,012'	1,612'	1,912'	317	66
2 Helper State 32-3	251'	111	2,506'	2,206'	1,806'	2,106'	349	66
3 Helper State 32-36	322'	142	3,215'	2,915'	2,515'	2,815'	467	66
4 Helper State 33-4	258'	114	2,579'	2,279'	1,879'	2,179'	361	66
5 Helper State 43-2	214'	94	2,136'	1,836'	1,436'	1,736'	288	66
6 Vea 32-32	323'	143	3,225'	2,925'	2,525'	2,825'	468	66

Cardinal Draw 9" 3000 BOP

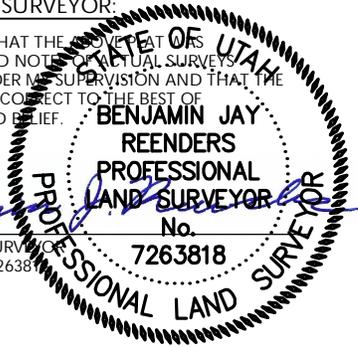


T14S, R10E

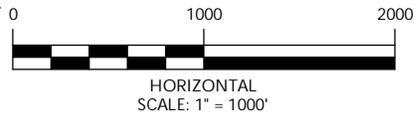


CERTIFICATE OF SURVEYOR:

THIS IS TO CERTIFY THAT THE SURVEY 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.



BENJAMIN JAY REENDERS
 PROFESSIONAL LAND SURVEYOR
 No. 7263818
 STATE OF UTAH



NOTES:

- ▲ INDICATES FOUND BLM BRASS CAP
- INDICATES CALCULATED CORNER POSITION FROM RECORD
- ELEVATION BASED ON NAVD88 (GEOID09)
- BASIS OF BEARING DERIVED FROM NAD83
- ALL MEASURED DISTANCES ARE GRID. COMBINED SCALE FACTOR: .99960008
- 1 CHAIN = 66 FEET

WELL PAD - HELPER STATE 33-4

HELPER STATE 33-4
 WELL PLAT
 2601' FSL & 2162' FEL
 NW1/4 SE1/4, SECTION 4
 T14S, R10E, S.L.M.
 CARBON COUNTY, UTAH

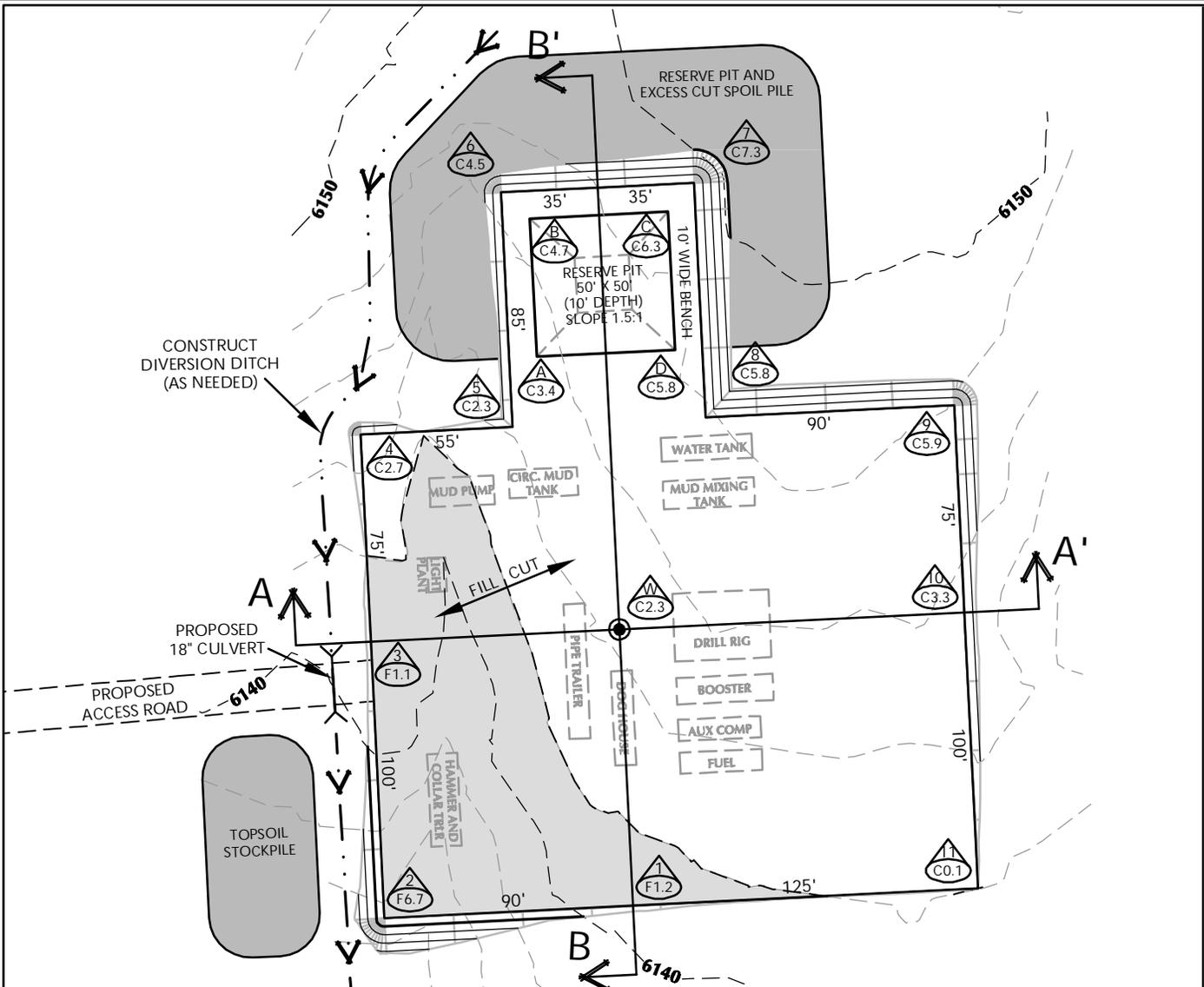
Anadarko E&P Co., L.P.
 an



CONSULTING, LLC
 2155 North Main Street
 Sheridan Wyoming 82801
 Phone 307-674-0609
 Fax 307-674-0182

DRAFTED BY: SEA	CHECKED BY: BJR	SHEET NO: 1 1 OF 12
DATE DRAFTED: 8/2010	DATE SURVEYED: 7/2010	
REVISED: 8/2010	FILE NAME: 10-44	

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WELL PAD LEGEND	
	WELL LOCATION
	EXISTING CONTOURS (2' INTERVAL)
	PROPOSED CONTOURS (2' INTERVAL)

HELPER STATE 33-4 DESIGN SUMMARY

EXISTING GRADE @ LOC. STAKE = 6144.3
 FINISHED GRADE ELEVATION = 6142.0'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1
 TOTAL DISTURBANCE = 1.12 ACRES
 SHRINKAGE FACTOR = 1.15
 SWELL FACTOR = 1.00

WELL PAD QUANTITIES

TOTAL CUT FOR WELL PAD = 3,686 C.Y.
 TOTAL FILL FOR WELL PAD = 1,318 C.Y.
 TOPSOIL @ 6" DEPTH = 905 C.Y.
 EXCESS MATERIAL = 2,368 C.Y.

RESERVE PIT QUANTITIES

TOTAL PIT CAPACITY WITH 2' OF FREEBOARD
 +/- 1,540 BARRELS
 TOTAL PIT VOLUME
 +/- 480 CY

Anadarko E&P Co., L.P.
 1099 18th Street - Denver, Colorado 80202



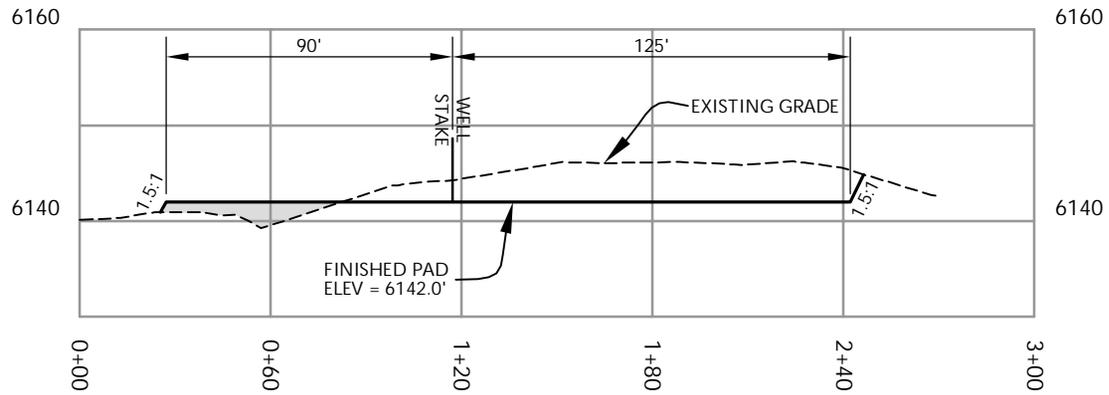
CONSULTING, LLC
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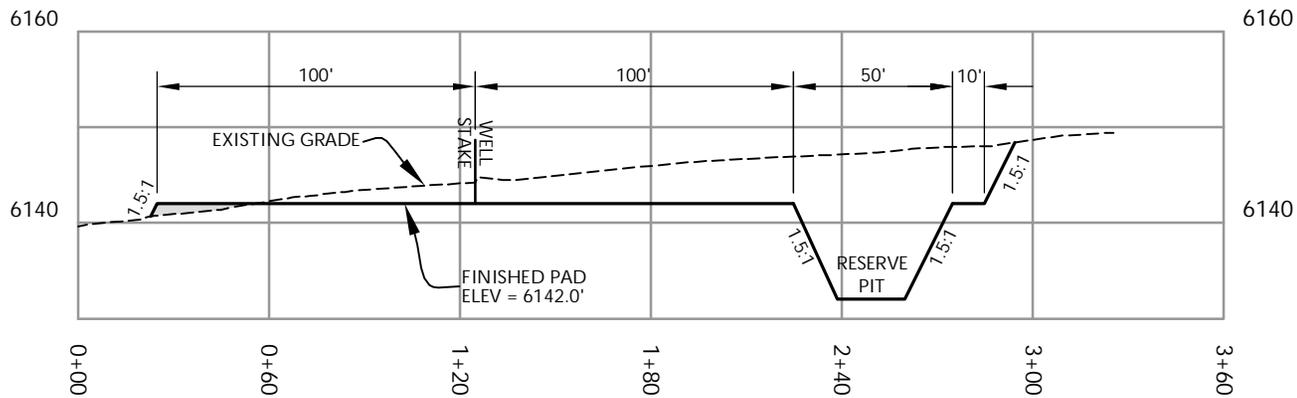
HORIZONTAL 1" = 60'

HELPER STATE 33-4
 WELL PAD - LOCATION LAYOUT
 2601' FSL, 2162' FEL
 NW1/4 SE1/4, SECTION 4, T14S, R10E,
 S.L.M., CARBON COUNTY, UTAH

Scale: 1"=60'	Date: 8/6/10	SHEET NO: 2 2 OF 12
REVISED:	SEA 8/26/10	



CROSS SECTION A-A'



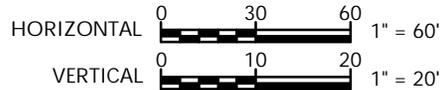
CROSS SECTION B-B'

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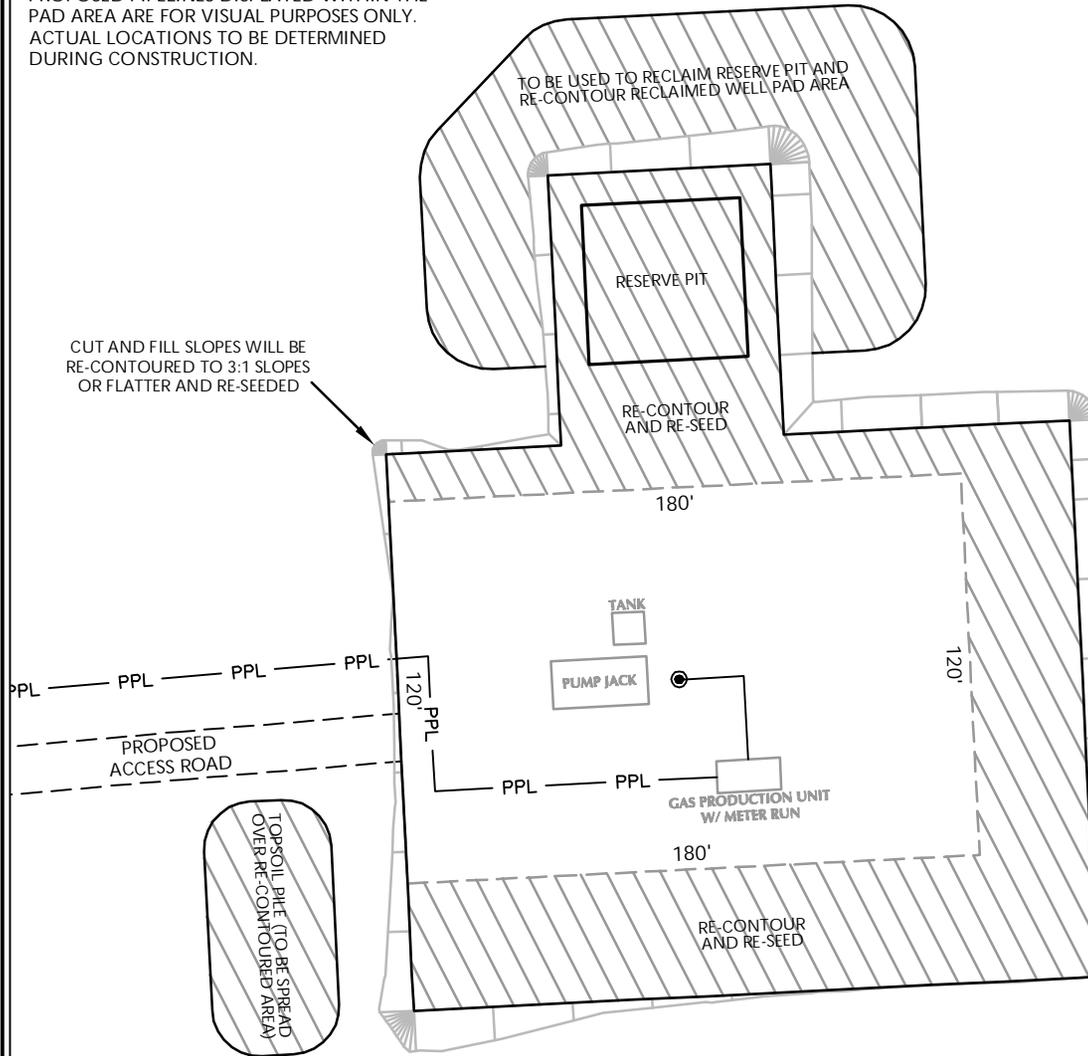
HELPER STATE 33-4
 WELL PAD - CROSS SECTIONS
 2601' FSL, 2162' FEL
 NW1/4 SE1/4, SECTION 4, T14S, R10E,
 S.L.M., CARBON COUNTY, UTAH



Scale: 1"=60'	Date: 8/6/10	SHEET NO: 3 3 OF 12
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PLEASE NOTE: LOCATIONS OF FACILITIES AND PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUAL PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.



WELL PAD LEGEND

-  WELL LOCATION
-  RECLAIMED AREA
-  RECLAIMED BOUNDARY
-  EXISTING PIPELINE
-  PROPOSED PIPELINE

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HORIZONTAL 0 30 60 1" = 60'

HELPER STATE 33-4
WELL PAD - RECLAMATION LAYOUT
2601' FSL, 2162' FEL
NW1/4 SE1/4, SECTION 4, T14S, R10E,
S.L.M., CARBON COUNTY, UTAH

Scale: 1"=60'	Date: 8/6/10	SHEET NO:
REVISED:	SEA 8/26/10	4 4 OF 12

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PHOTOGRAPH OF HELPER STATE 33-4 WELL LOCATION - CAMERA ANGLE NORTH



PHOTOGRAPH OF HELPER STATE 33-4 WELL LOCATION - CAMERA ANGLE EAST

Anadarko E&P Co., L.P.
 1099 18th Street - Denver, Colorado 80202

LOCATION PHOTOGRAPHS
 HELPER STATE 33-4
 2601' FSL, 2162' FEL
 NW1/4 SE1/4, SECTION 4, T14S, R10E,
 S.L.M., CARBON COUNTY, UTAH



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Scale:	NTS	Date:	8/4/10	SHEET NO:	5
REVISED:		SEA	8/11/10	5 OF 12	



PHOTOGRAPH OF HELPER STATE 33-4 WELL LOCATION - CAMERA ANGLE SOUTH



PHOTOGRAPH OF HELPER STATE 33-4 WELL LOCATION - CAMERA ANGLE WEST

Anadarko E&P Co., L.P.
 1099 18th Street - Denver, Colorado 80202

LOCATION PHOTOGRAPHS
 HELPER STATE 33-4
 2601' FSL, 2162' FEL
 NW1/4 SE1/4, SECTION 4, T14S, R10E,
 S.L.M., CARBON COUNTY, UTAH



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Scale:	NTS	Date:	8/4/10	SHEET NO:	6
REVISED:		SEA	8/11/10	6 OF 12	



PHOTOGRAPH OF PROPOSED ACCESS TO THE HELPER STATE 33-4 WELL LOCATION - CAMERA ANGLE EAST

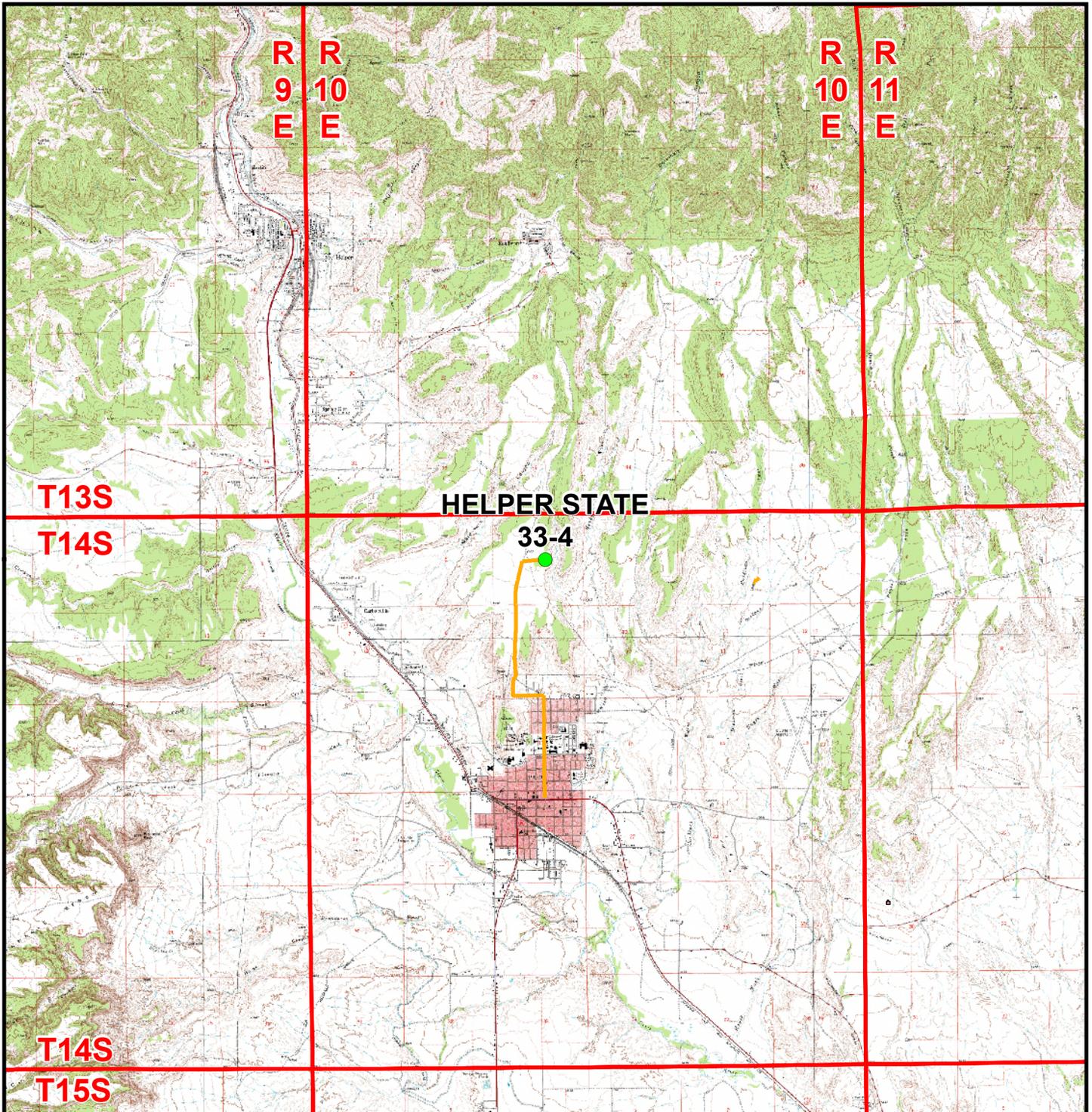
Anadarko E&P Co., L.P.
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LOCATION PHOTOGRAPHS
 HELPER STATE 33-4
 2601' FSL, 2162' FEL
 NW1/4 SE1/4, SECTION 4, T14S, R10E,
 S.L.M., CARBON COUNTY, UTAH



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Scale:	NTS	Date:	8/4/10	SHEET NO:	7
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Legend

- Proposed Helper State 33-4 Well Location
- Access Route - Proposed

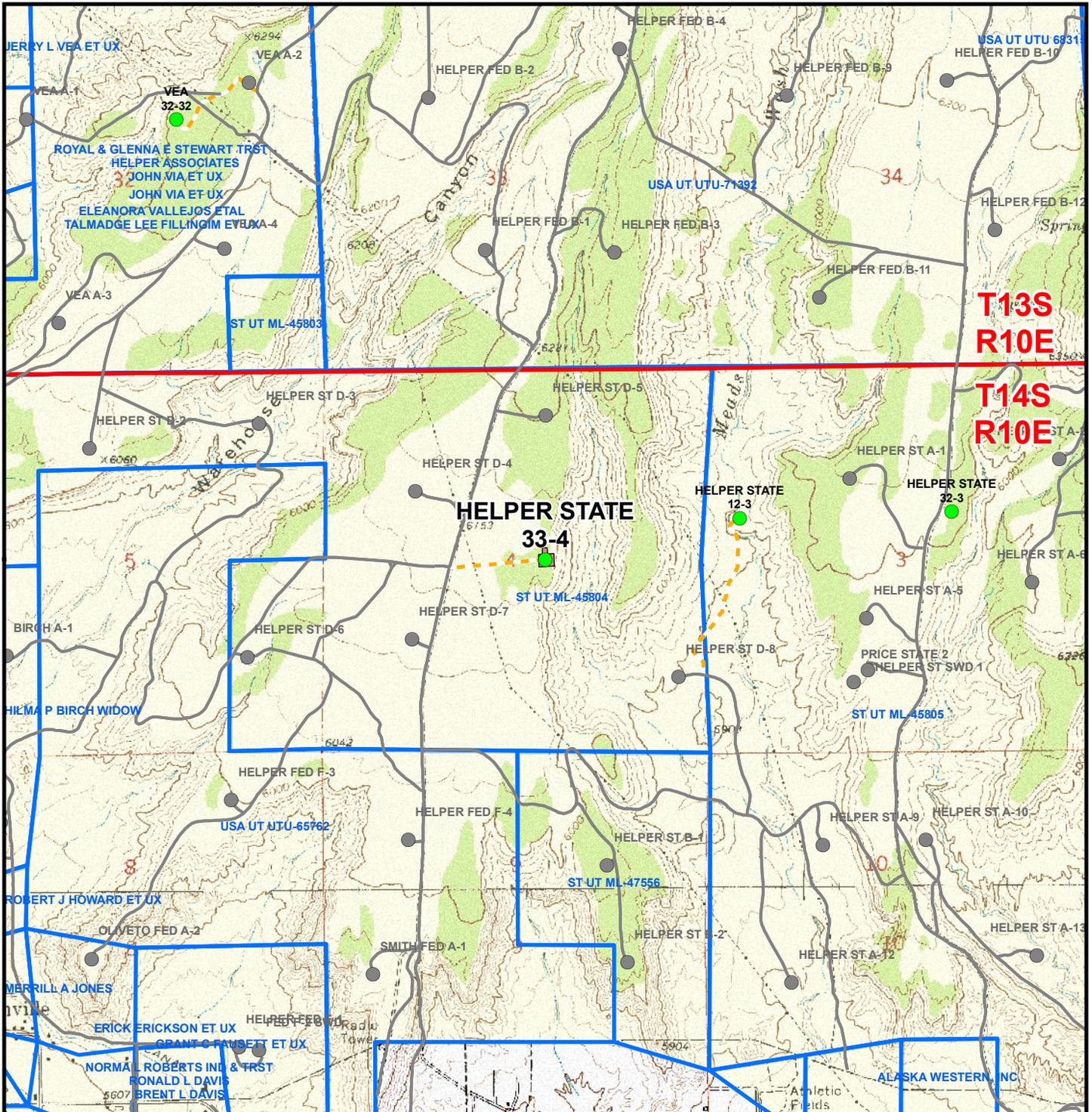
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HELPER STATE 33-4
TOPO A
 2601' FSL, 2162' FEL
 NW¼ SE¼, SECTION 4, T14S, R10E
 S.L.M., CARBON COUNTY, UTAH

609
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 2155 North Main Street
 Sheridan, WY 82801
 Phone (307) 674-0609
 Fax (307) 674-0182



Scale: 1:100,000	NAD83 USP Central	Sheet No:
Drawn: JELO	Date: 6 Aug 2010	8
Revised: KGS	Date: 11 Aug 2010	



**T13S
R10E**
**T14S
R10E**

**HELPER STATE
33-4**

Legend

- Well - Proposed
- Well - Existing
- Well Pad
- Road - Proposed
- Road - Existing
- APC Lease

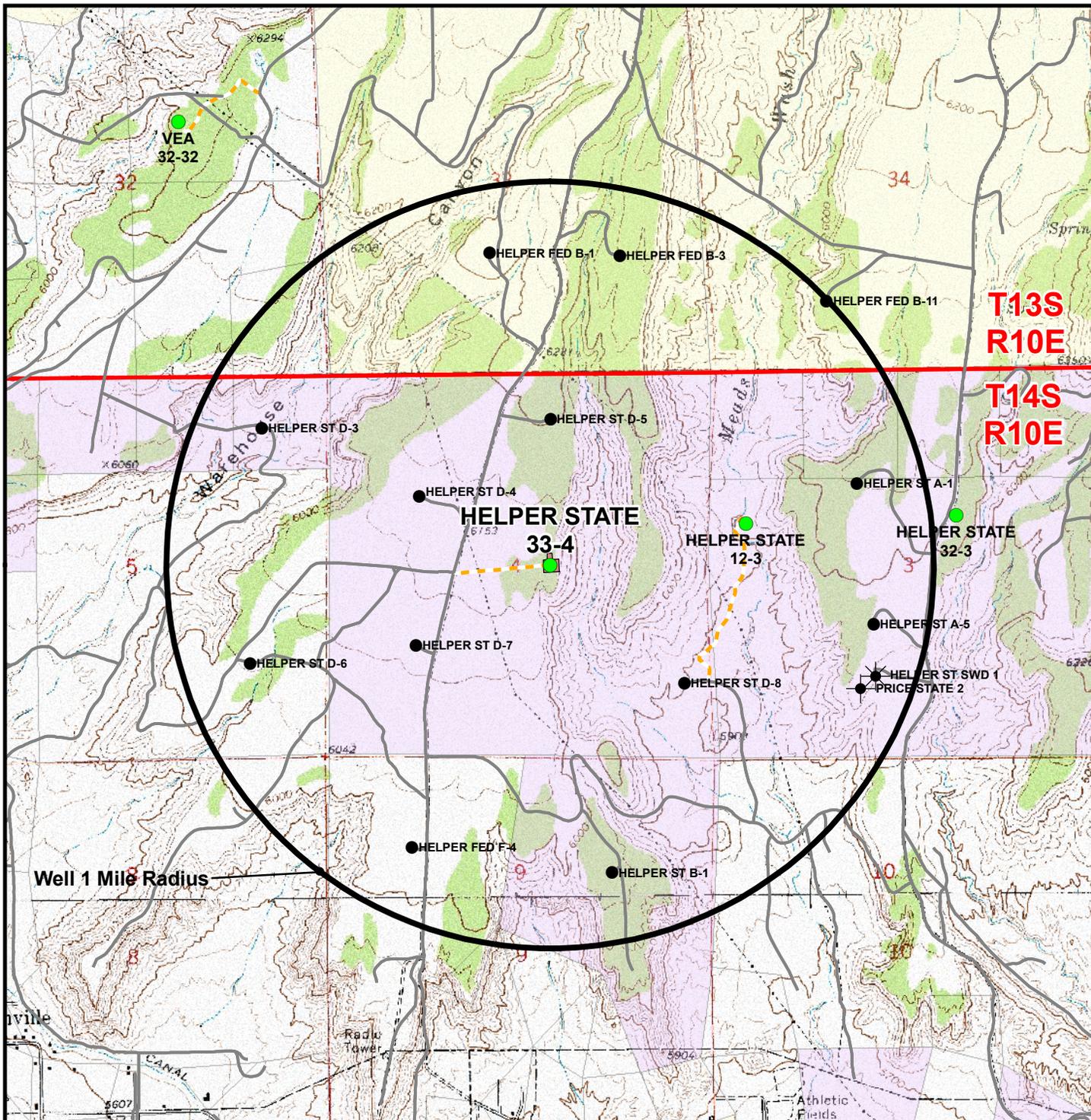
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**HELPER STATE 33-4
TOPO B
2601' FSL, 2162' FEL
NW¼ SE¼, SECTION 4, T14S, R10E
S.L.M., CARBON COUNTY, UTAH**

609
CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182



Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: JELo	Date: 6 Aug 2010	9
Revised: KGS	Date: 11 Aug 2010	
		9 of 12



Well 1 Mile Radius

**T13S
R10E**
**T14S
R10E**

**HELPER STATE
33-4**

**HELPER STATE
12-3**

**HELPER STATE
32-3**

Legend

- Well - Proposed
- Well - 1 Mile Radius
- Well Pad
- Road - Proposed
- Road - Existing
- Private Surface Ownership
- BLM Surface Ownership
- State of Utah Surface Ownership
- Carbon County Surface Ownership

Well locations derived from State of Utah, Dept. of Natural Resources, Division of Oil, Gas and Mining

- Producing
- Temporarily-Abandoned
- ⊛ Active
- Shut-In
- ⊕ Inactive
- ⊛ Plugged and Abandoned

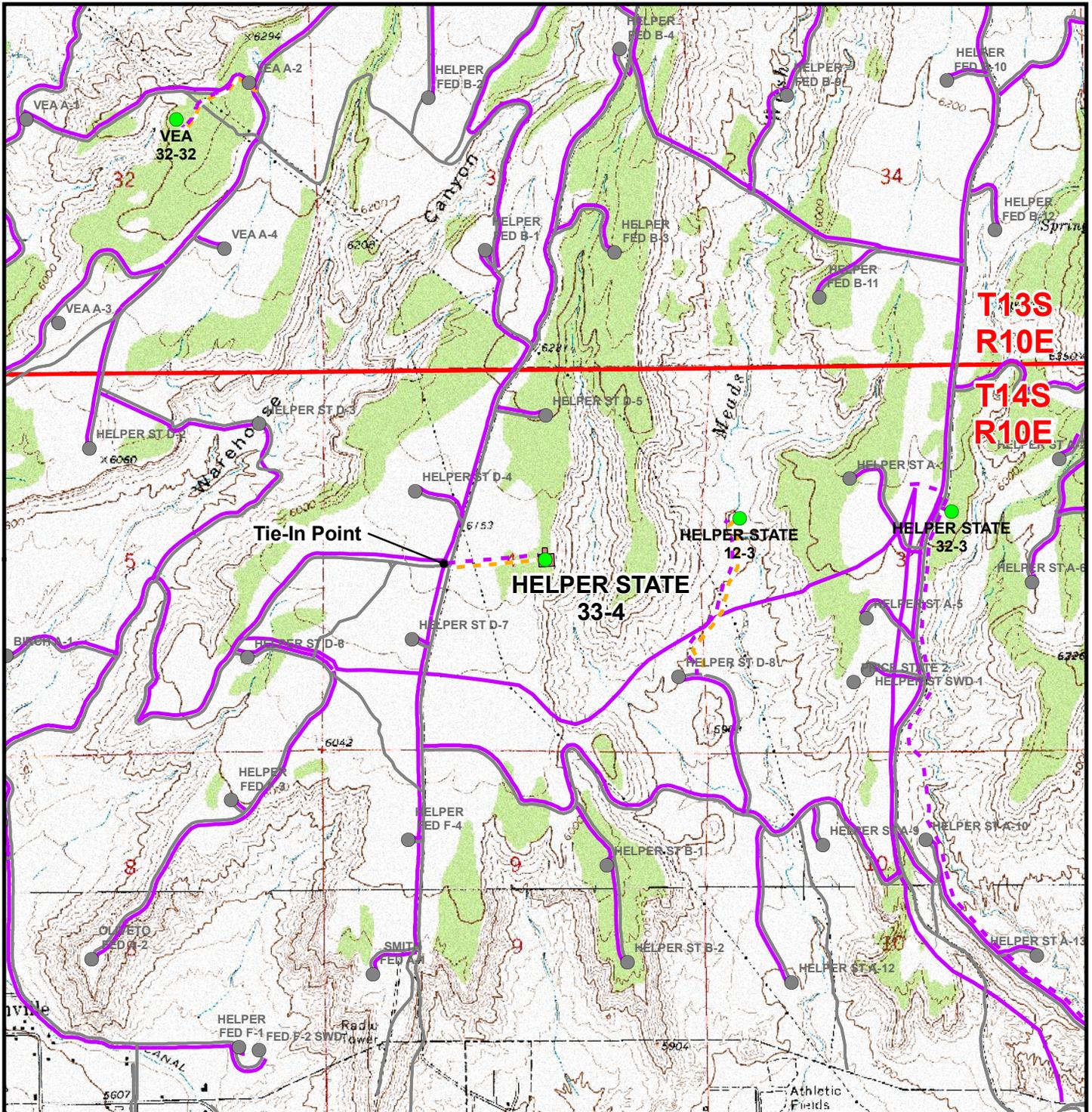
ANADARKO E&P Co., L.P.
1099 18th Street, Denver, Colorado 80202

**HELPER STATE 33-4
TOPO C
2601' FSL, 2162' FEL
NW¼ SE¼, SECTION 4, T14S, R10E
S.L.M., CARBON COUNTY, UTAH**

609
CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182



Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: JELo	Date: 6 Aug 2010	10
Revised: KGS	Date: 11 Aug 2010	



Legend

- Well - Proposed
- Well - Existing
- Well Pad
- Pipeline - Proposed
- Pipeline - Existing
- Road - Proposed
- Road - Existing

Total Proposed Road Length: ±1,250ft
Proposed Pipeline Length From Edge of Pad to Tie-In Point: ±1,270ft
Proposed Pipeline Length From Edge of Pad to Gas Production Unit: ±150ft

ANADARKO E&P Co., L.P.
 1099 18th Street, Denver, Colorado 80202

HELPER STATE 33-4
TOPO D
2601' FSL, 2162' FEL
NW¼ SE¼, SECTION 4, T14S, R10E
S.L.M., CARBON COUNTY, UTAH


609
CONSULTING, LLC
 2155 North Main Street
 Sheridan, WY 82801
 Phone (307) 674-0609
 Fax (307) 674-0182



Scale: 1" = 2,000ft	NAD83 USP Central
Drawn: JELO	Date: 6 Aug 2010
Revised: KGS	Date: 31 Aug 2010

Sheet No:
11 11 of 12

ANADARKO E&P CO., LP
HELPER STATE 33-4
SECTION 4, T14S, R10E, S.L.M.

Proceed in a northerly direction from Price, Utah, along North 300 E Street approximately 1.1 miles to the junction of North 300 E Street and 900 N Street. Exit left and proceed along 900 N Street in a westerly direction approximately 0.3 miles to the junction of 900 N Street and Woodhill Road. Exit right and proceed in a northerly direction along Woodhill Road approximately 1.8 miles to the proposed access road to the east. Exit right and follow the road flags in an easterly direction approximately 1,250 feet to the proposed Helper State 33-4 well location.

Total distance from Price, Utah, to the proposed Helper State 33-4 well location is approximately 3.4 miles.

SURFACE USE PLAN of OPERATIONS (SUPO)
Helper Field: Six (6) In-fill Wells

Carbon County, Utah
Anadarko Petroleum Corporation

Helper State 12-3

Section 3 T14S R10E
2113' FNL 524' FWL (SW/4 NW/4)
State Surface
State Minerals: ST UT ML-45805

Helper State 33-4

Section 4 T14S R10E
2601' FSL 2162' FEL (NW/4 SE/4)
State Surface
State Minerals: ST UT ML-45804

Helper State 32-3

Section 3 T14S R10E
2066' FNL 1947' FEL (SW/4 NE/4)
State Surface
State Minerals: ST UT ML-45805

Helper State 43-2

Section 2 T14S R10E
1506' FNL 480' FEL (NE/4 SE/4)
State Surface
State Minerals: ST UT ML-45805

Helper State 32-36

Section 36 T13S R10E
2142' FNL 2345' FEL (SW/4 NE/4)
State Surface
State Minerals: ST UT ML-45802

Vea 32-32

Section 32 T13S R10E
1798' FNL 1886' FEL (SW/4 NE/4)
Fee Surface: Vea
Fee Minerals: Anadarko Petroleum Corporation

This Surface Use Plan of Operations (SUPO) contains surface operating procedures for Anadarko Petroleum Corporation (APC) pertaining to actions that involve the State of Utah School and Institutional Trust Lands Administration (SITLA) in the development of minerals leased to APC (including, but not limited to, APDs/SULAs/ROEs/ROWs and/or easements).

See associated Utah Division of Oil, Gas, and Mining (UDOGM) Form 3(s), plats, maps, and other attachments for site-specific information on projects represented herein.

A. Existing Roads:

Existing roads consist of county roads and improved/unimproved lease roads. APC will maintain existing roads in a condition that is the same as or better than before operations began and in a safe and usable condition. Maintenance of existing roads will continue until final abandonment and reclamation of well pads and/or other facilities. The road maintenance may include, but is not limited to, blading, ditching, culvert installation/cleanout, surfacing, and dust control.

Typically, roads, gathering lines and electrical distribution lines will occupy common disturbance corridors and roadways will be used as working space. All disturbances located in the same corridor will overlap each other to the maximum extent possible.

B. Planned Access Roads:

New access roads to these well locations are summarized below in Table 1, and shown in each well's Topo D map. Applicable Carbon County encroachment and/or pipeline crossing permits will be obtained prior to construction/development, if needed.

Table 1
New Access Road Details

Well Name	New Access Road Length	Section/Township/Range		Surface Owner
		Starting	Ending (at well pad)	
Helper State 12-3	±2410'	4-T14S-R10E	3-T14S-R10E	State of Utah
Helper State 32-3	±200'	3-T14S-R10E	3-T14S-R10E	State of Utah
Helper State 32-36	±4810'	36-T13S-R10E	36-T13S-R10E	State of Utah
Helper State 33-4	±1400'	4-T14S-R10E	4-T14S-R10E	State of Utah
Helper State 43-2	±310'	2-T14S-R10E	2-T14S-R10E	State of Utah
Vea 32-32 ¹	±1600'	32-T13S-R10E	32-T13S-R10E	Vea

¹ The well pad and access road on Vea surface will be handled under a separate Surface Use Agreement (SUA) with the private surface owner.

Where roads are new or to be reconstructed, they will be located, designed, and maintained to meet the standards of SITLA and other commonly accepted Best Management Practices (BMPs). If a new road/corridor were to cross a water of the United States, APC will adhere to the requirements of applicable Nationwide or Individual Permits of the Department of Army Corps of Engineers (COE).

The running surface will be crowned/ditched with a running surface of ±16' and the total disturbance width of 45'. The temporary construction width is 75'. Plans for improvement and/or maintenance of existing roads are to maintain in as good or better conditions than at present. A regular maintenance plan will include, but not be limited to, blading, ditching, and surfacing.

Turnouts; major cut and fills; culverts; bridges; gates; cattle guards; low water crossings; or modifications needed to existing infrastructure/facilities were determined at the on-site and, as applicable, are typically shown on attached Exhibits and Topo maps.

C. Location of Existing and Proposed Facilities:

Gathering Facilities/Utility Trenches:

The following pipeline information will apply if the wells are productive (see Topo D). There will be a gas pipeline and a water transmission pipeline in the same trench. Additionally, electrical power will be buried in a separate, but adjacent, trench with appropriate safety measures in place. The trenches for the pipelines will follow the access road whenever possible. All trenches will be within the corridor as surveyed by the archaeologist.

Helper Field: Six (6) In-fill wells**Surface Use Plan of Operations**

Each gathering pipeline will have the following specifications:

	Gas Gathering	Water Gathering
Diameter:	4" – 6"	4" – 6"
Type:	SDR 11	SDR 9
Material:	poly HDPE 4710	poly HDPE 4710
Buried depth:	4'	4'
Design pressure:	100 psi	200 psi
Test pressures:	120 psi	120 psi
Test material:	Air	Air

Table 2
New Gas Gathering Pipeline Details

Well Name	Gas Gathering Pipeline Length	Section/Township/Range		Surface Owner
		Starting	Ending (at well pad)	
Helper State 12-3	±1730'	4-T14S-R10E	3-T14S-R10E	State of Utah
Helper State 32-3	±190'	3-T14S-R10E	3-T14S-R10E	State of Utah
Helper State 32-36	±2140'	36-T13S-R10E	36-T13S-R10E	State of Utah
Helper State 33-4	±1420'	4-T14S-R10E	4-T14S-R10E	State of Utah
Helper State 43-2	±450'	2-T14S-R10E	2-T14S-R10E	State of Utah
Vea 32-32 ¹	±1620'	32-T13S-R10E	32-T13S-R10E	Vea

¹ The well pad and access road on Vea surface will be handled under a separate Surface Use Agreement (SUA) with the private surface owner.

Table 3
New Liquids Gathering Pipeline Details

Well Name	Liquids Gathering Pipeline Length	Section/Township/Range		Surface Owner
		Starting	Ending (at well pad)	
Helper State 12-3	±2580'	4-T14S-R10E	3-T14S-R10E	State of Utah
Helper State 32-3	±190'	3-T14S-R10E	3-T14S-R10E	State of Utah
Helper State 32-36	±2140'	36-T13S-R10E	36-T13S-R10E	State of Utah
Helper State 33-4	±1420'	4-T14S-R10E	4-T14S-R10E	State of Utah
Helper State 43-2	±450'	2-T14S-R10E	2-T14S-R10E	State of Utah
Vea 32-32 ¹	±1620'	32-T13S-R10E	32-T13S-R10E	Vea

¹ The well pad and access road on Vea surface will be handled under a separate Surface Use Agreement (SUA) with the private surface owner.

The proposed pipelines will be buried and will include separate lines for gas gathering and liquid gathering in one trench, and electrical lines in an adjacent, separate trench. Where the utility trench is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. APC requests a permanent 45' right-of-way (ROW) adjacent to the road for the life of the project for maintenance, repairs, and/or upgrades. For construction purposes, APC requests a temporary 75' ROW. Where the pipeline is not adjacent to the road or well pad, APC requests a temporary 45' construction ROW and 30' permanent ROW.

The proposed trench width for the pipeline would range from 18-48 inches and will be excavated to a depth of 48 to 60 inches of normal soil cover.

Pipeline signs will be installed along the right-of-way to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves and T's, will be installed at various locations for connection, corrosion prevention and/or for safety purposes. Trace wires follow the poly lines.

D. Location and Type of Water Supply:

Water use for drilling and completion purposes will be minimal as these wells will be air drilled. When water is needed, it will be obtained from the city of Price

E. Source of Construction Materials:

Construction operations will typically be completed with native materials found on location. If needed, construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source and described in subsequent Sundry requests. No construction materials will be removed from State lands without prior approval from SITLA.

F. Methods of Handling Waste Materials:

Should the well be productive, produced water will be contained in a water tank and will be transported by pipeline and/or truck to an approved disposal sites facilities and/or Salt Water Disposal (SWD) injection well.

Drill cuttings and/or fluids will be contained in the reserve pit. Cuttings will be buried in pit(s) upon closure. Unless otherwise approved, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface runoff. Should fluid hydrocarbons be encountered during drilling, completions or well testing, product will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should

petroleum hydrocarbons unexpectedly be released into a pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by SITLA. Hydrocarbon removal will also take place prior to the closure of the pit, unless authorization is provided for disposal via alternative pit closure methods (e.g. solidification).

The reserve pit will be lined with a synthetic material 20-mil or thicker, The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. Any additional pits necessary to subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed the next full summer after completion of work at a well location.

For the protection of livestock and wildlife, all open pits and cellars will be fenced and covered to prevent wildlife or livestock entry. The fence to be used is 45” net fence.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Reserve pit liners will be cut off or folded as near to the mud surface as possible and as safety considerations allow and buried on location.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Any undesirable event, accidental release, or in excess of reportable quantities will be managed according to the notification requirements of UDOGMs “Reporting Oil and Gas Undesirable Events” rule, and, where State wells are participatory to a Federal agreement, according to NTL-3A.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term “hazardous materials” as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities and may be kept in limited quantities on drilling sites and well locations for short periods of time during drilling or completion activities.

G. Ancillary Facilities:

None are anticipated.

H. Well Site Layout (see Well Pad Design Summary):

The location, orientation and aerial extent of each drill pad; reserve/completion/flare pit; access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure; proposed cuts and fills; and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment and facility layout; however, the area of disturbance, as described in the survey, will not be exceeded.

Coordinates are provided in the National Spatial Reference System, North American Datum, 1983 (NAD83) or latest edition. Distances are depicted on each plat to the nearest two adjacent section lines.

I. Plans for Reclamation of the Surface:

Surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. This reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but are not limited to: re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation includes pit closure, re-contouring (where possible), soil bed preparation, topsoil placement, seeding, and/or weed control.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit.

Final Reclamation

Final reclamation will be performed for newly drilled unproductive wells and/or at the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by APC. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring, final grading will be conducted over the entire surface of the well site and access road. Where practical, the area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers and surface materials will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep perpendicular to the natural flow of water.

All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to UDOGM.

Seeding and Measures Common to Interim and Final Reclamation

Reclaimed areas may be fenced to exclude grazing and encourage re-vegetation.

On slopes where severe erosion can become a problem and the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. The slope will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to, erosion control blankets and bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage.

Seeding will occur year-round as conditions allow. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-vegetation. The site specific seed mix will be provided by SITLA.

J. Surface/Mineral Ownership:

Well Name
Helper State 12-3

Helper State 32-3
Helper State 32-36
Helper State 33-4
Helper State 43-2

SITLA
675 East 500 South, Suite 500
Salt Lake City, UT 84102

(801) 538-5100

Well Name
Vea 32-32

John Vea
799 W 4000 North
Helper, UT 84526-2295

435-472-3129

K. Other Information:

A Class I literature report was completed in August 2010 by SWCA. For additional details please refer to report 16853, SWCA report number 2010-342, and Utah State project number: U-10-ST-00505ps.

A paleontological reconnaissance survey, if needed, will be conducted by SWCA, and a report will be provided under separate cover.

L. Lessee's or Operators' Representative & Certification:

Kathy Schneebeck Dulnoan
Staff Regulatory Analyst
Anadarko Petroleum Corporation
PO Box 173779
Denver, CO 80217-3779
(720) 929-6007

Tommy Thompson
General Manager, Drilling
Anadarko Petroleum Corporation
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable state and Federal laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Anadarko Petroleum Corporation is considered to be the operator of the subject well. Anadarko Petroleum Corporation agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage for State lease activities is provided by State Surety Bond 22013542, and for applicable Federal lease activities and pursuant to 43 CFR 3104, by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

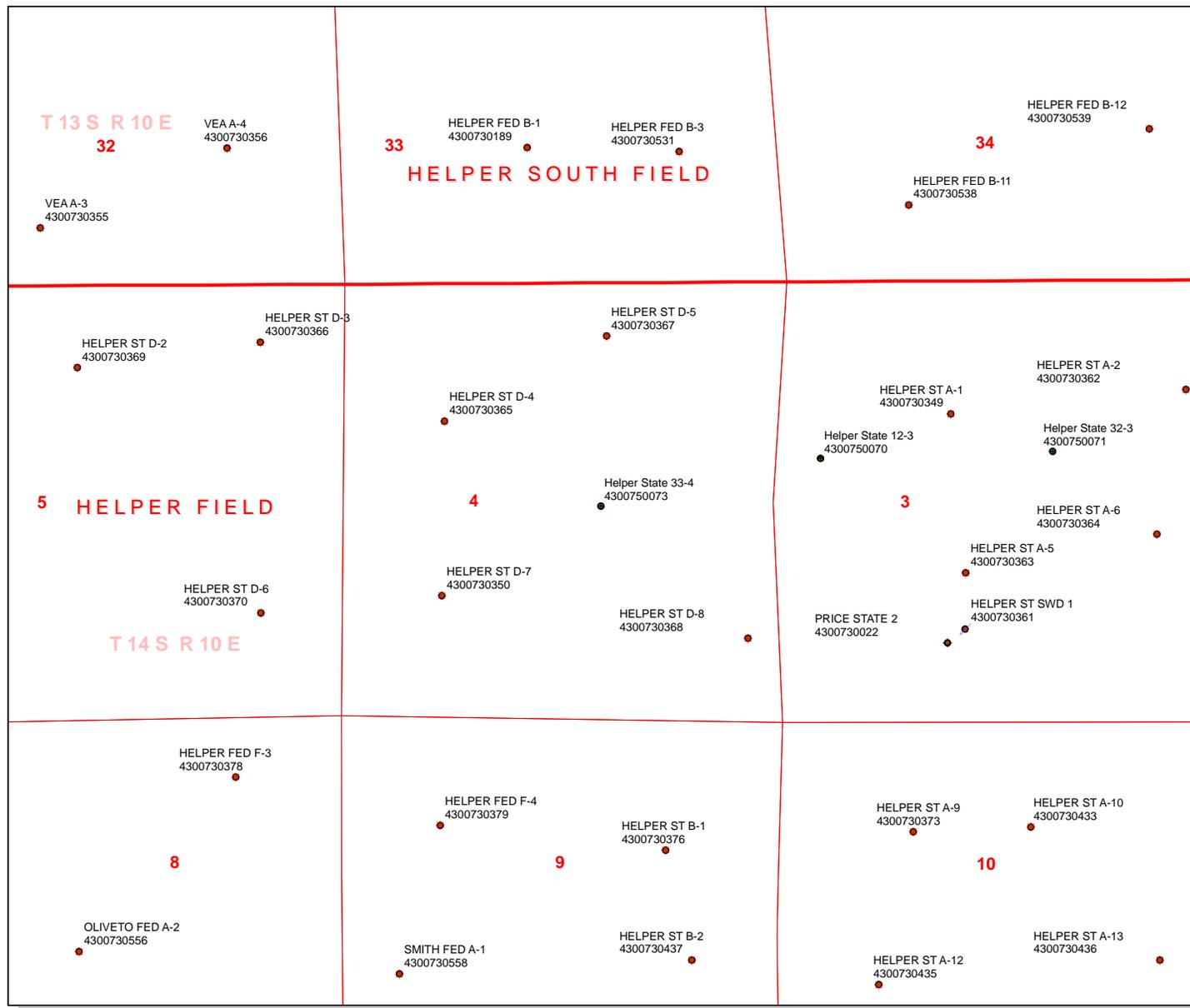
Kathy Schneebeck Dulnoan

August 24, 2010

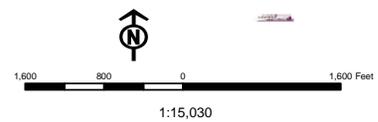
Date

API Number: 4300750073
Well Name: Helper State 33-4
Township 14.0 S Range 10.0 E Section 04
Meridian: SLBM
Operator: ANADARKO PETROLEUM CORP

Map Prepared:
 Map Produced by Diana Mason



Units	Wells Query
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LA - Location Abandoned
PI OIL	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERML	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
Fields	SGW - Shut-in Gas Well
Sections	SOW - Shut-in Oil Well
Township	TA - Temp. Abandoned
Bottom Hole Location - AGRC	TW - Test Well
	WDW - Water Disposal
	WW - Water Injection Well
	WSW - Water Supply Well





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Utah Division of Water Rights



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From: Jim Davis
To: Bonner, Ed; Mason, Diana
CC: Garrison, LaVonne; kathy.schneebeckdulnoan@anadarko.com
Date: 9/15/2010 9:09 AM
Subject: Anadarko Helper St well approvals

The following APDs have been approved by SITLA including arch clearance. The proposed wells are outside the paleo sensitive area, therefore paleo clearance was not required.

Anadarko's Helper State 43-2 [API #4300750074]

Anadarko's Helper State 33-4 [API #4300750073]

Anadarko's Helper State 32-36 [API #4300750072]

Anadarko's Helper State 32-3 [API #4300750071]

Anadarko's Helper State 12-3 [API #4300750070]

-Jim

Jim Davis
Utah Trust Lands Administration
jimdavis1@utah.gov
Phone: (801) 538-5156

BOPE REVIEW ANADARKO PETROLEUM CORP Helper State 33-4 43007500730000

Well Name	ANADARKO PETROLEUM CORP Helper State 33-4 43007500730000			
String	Surf	Prod		
Casing Size(")	8.625	5.500		
Setting Depth (TVD)	258	2579		
Previous Shoe Setting Depth (TVD)	35	258		
Max Mud Weight (ppg)	8.3	13.0		
BOPE Proposed (psi)	500	3000		
Casing Internal Yield (psi)	2950	4810		
Operators Max Anticipated Pressure (psi)	1000	7.5		

Calculations	Surf String	8.625	"
Max BHP (psi)	.052*Setting Depth*MW=	112	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	81	YES <input type="checkbox"/> air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	55	YES <input type="checkbox"/> OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	63	NO <input type="checkbox"/>
Required Casing/BOPE Test Pressure=		258	psi
*Max Pressure Allowed @ Previous Casing Shoe=		35	psi *Assumes 1psi/ft frac gradient

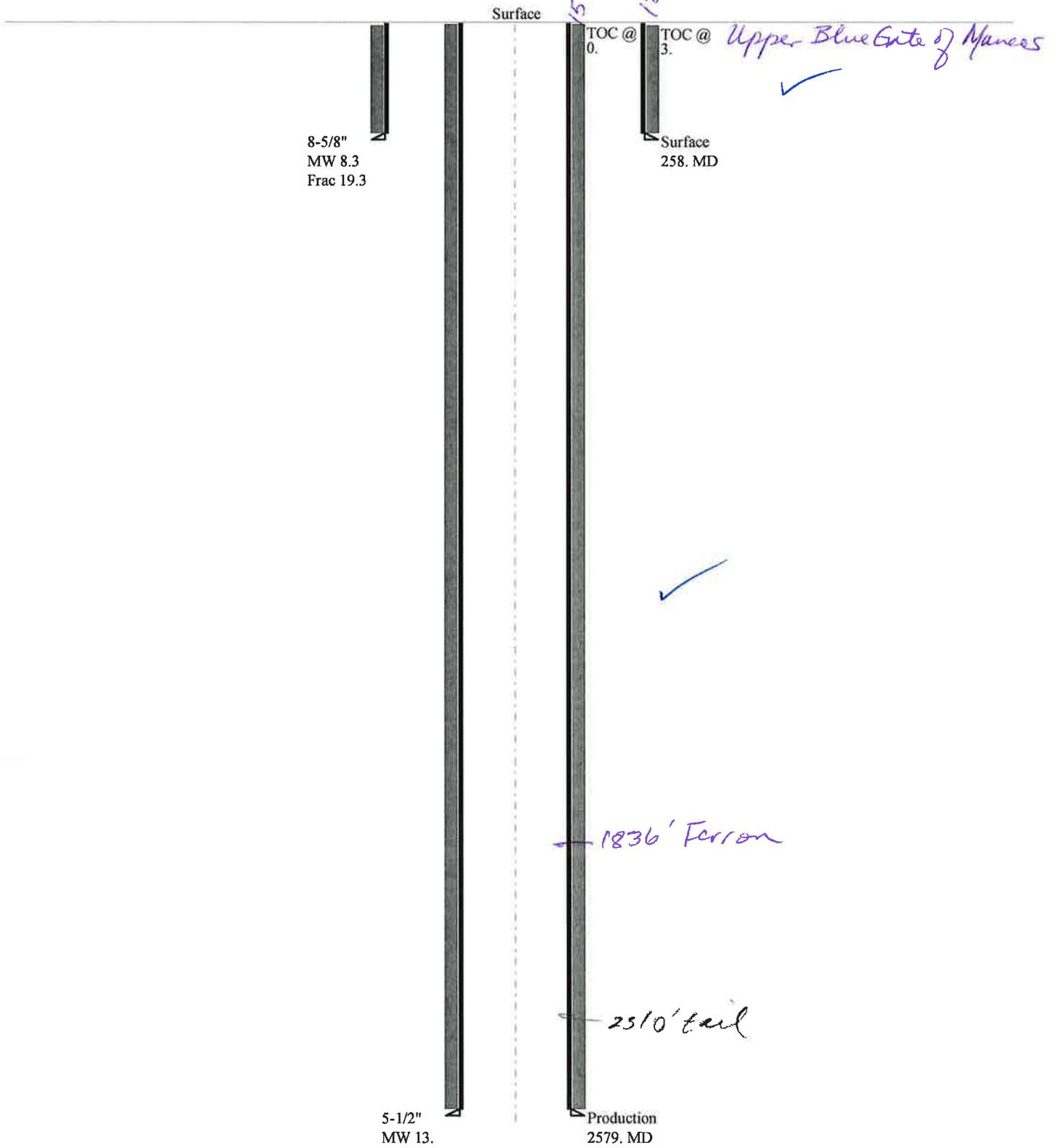
Calculations	Prod String	5.500	"
Max BHP (psi)	.052*Setting Depth*MW=	1743	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	1434	YES <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1176	YES <input type="checkbox"/> OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	1232	NO <input type="checkbox"/> Reasonable for area
Required Casing/BOPE Test Pressure=		2579	psi
*Max Pressure Allowed @ Previous Casing Shoe=		258	psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BHP (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO <input type="checkbox"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO <input type="checkbox"/>
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BHP (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO <input type="checkbox"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO <input type="checkbox"/>
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

43007500730000 Helper State 33-4

Casing Schematic



Well name:	43007500730000 Helper State 33-4		
Operator:	ANADARKO PETROLEUM CORP		
String type:	Surface	Project ID:	43-007-50073
Location:	CARBON COUNTY		

Design parameters:

Collapse

Mud weight: 8.330 ppg
 Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
 Surface temperature: 74 °F
 Bottom hole temperature: 78 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 100 ft
 Cement top: 3 ft

Burst

Max anticipated surface pressure: 227 psi
 Internal gradient: 0.120 psi/ft
 Calculated BHP 258 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
 8 Round LTC: 1.70 (J)
 Buttress: 1.60 (J)
 Premium: 1.50 (J)
 Body yield: 1.50 (B)

Tension is based on air weight.
 Neutral point: 226 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 2,579 ft
 Next mud weight: 13,000 ppg
 Next setting BHP: 1,742 psi
 Fracture mud wt: 19,250 ppg
 Fracture depth: 258 ft
 Injection pressure: 258 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	258	8.625	24.00	J-55	ST&C	258	258	7.972	1328
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	112	1370	12.271	258	2950	11.43	6.2	244	39.41 J

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

Phone: 801 538-5357
 FAX: 801-359-3940

Date: September 15, 2010
 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 258 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43007500730000 Helper State 33-4		
Operator:	ANADARKO PETROLEUM CORP		
String type:	Production	Project ID:	43-007-50073
Location:	CARBON	COUNTY	

Design parameters:

Collapse

Mud weight: 13.000 ppg
Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 110 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: Surface

Burst

Max anticipated surface pressure: 1,432 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 1,742 psi

No backup mud specified.

Tension:

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

Non-directional string.

Tension is based on air weight.
Neutral point: 2,072 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2579	5.5	15.50	J-55	ST&C	2579	2579	4.825	8579
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	1742	4040	2.320	1742	4810	2.76	40	202	5.05 J

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

Phone: 801 538-5357
FAX: 801-359-3940

Date: September 15, 2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2579 ft, a mud weight of 13 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.



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1099 18th Street
Denver, CO 80202
720.929.6000(main)
720.929.6551 (direct)

September 28, 2010

Ms. Diana Mason
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-6100

RE: Helper State 33-4
T14S-R10E, Section 4: NW/4SE/4
Surface & BH Location: 2601' FSL, 2162' FEL
Carbon County, Utah

Dear Ms. Mason:

Anadarko Petroleum Corp. has submitted a permit to drill the captioned well to test the Ferron Formation. The well location is at an exception location to State Rule 241-01A. The location is less than 460' from the drilling unit boundary. The well location was moved for topographic reasons. Anadarko owns 100% of the leasehold in the offset lands and has no objection to the exception location.

Anadarko Petroleum Corp. requests your approval of this exception location. If you have any questions or require any additional information, please do not hesitate to call me at 720-929-6551.

Sincerely,


Lynn Padgett
Staff Landman

ON-SITE PREDRILL EVALUATION
Utah Division of Oil, Gas and Mining

Operator ANADARKO PETROLEUM CORP
Well Name Helper State 33-4
API Number 43007500730000 **APD No** 2987 **Field/Unit** HELPER
Location: 1/4,1/4 NWSE **Sec 4 Tw** 14.0S **Rng** 10.0E 2601 FSL 2162 FEL
GPS Coord (UTM) 516797 4387334 **Surface Owner**

Participants

M. Jones (UDOGM), K. Gathings, T. Kazeck, D. Holmer, J. Hartley (APC), M. Ritt, C. Kastrinko (609 Consulting), Nicole Nielson (UDWR).

Regional/Local Setting & Topography

North of Price, Utah. Gently sloped (north to south) bench top with small drainages throughout.

Surface Use Plan

Current Surface Use

Grazing
Recreational
Wildlfe Habitat

New Road Miles	Well Pad	Src Const Material	Surface Formation
0.24	Width 175 Length 215	Onsite	

Ancillary Facilities

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Pinion Juniper stand.

Soil Type and Characteristics

Sandy.

Erosion Issues Y

erosive upon disturbance.

Sedimentation Issues N

Site Stability Issues Y

Rip rap corner #4.

Drainage Diverson Required? Y

divert drainage around location on the west side.

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? Y Paleo Potential Observed? N Cultural Survey Run? Y Cultural Resources? N

Reserve Pit

Site-Specific Factors

Site Ranking

Distance to Groundwater (feet)	>200	0	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)	>1320	0	
Native Soil Type	High permeability	20	
Fluid Type	Air/mist	0	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)	10 to 20	5	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	25	1 Sensitivity Level

Characteristics / Requirements

Dugout earthen (50x50x10) exterior to pad dimensions.

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

Other Observations / Comments

Mark Jones
Evaluator

8/26/2010
Date / Time

Application for Permit to Drill

Statement of Basis

9/29/2010

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
2987	43007500730000	REVISION	GW	S	Yes
Operator	ANADARKO PETROLEUM CORP		Surface Owner-APD		
Well Name	Helper State 33-4		Unit		
Field	HELPER		Type of Work	DRILL	
Location	NWSE 4 14S 10E S 2601 FSL 2162 FEL GPS Coord (UTM) 516811E 4387318N				

Geologic Statement of Basis

A well at this location will spud into a soil developed on Quaternary/Tertiary Pediment Mantle that covers the Upper Portion of the Blue Gate Member of the Mancos Shale. The Pediment Mantle or the near-surface Garley Canyon Sandstone Member of the Mancos Shale may host a limited fresh water resource and should be afforded the protection of the surface casing and cementing program. The Garley Canyon Sandstone Member may be absent at this location. These are the only aquifer sands likely to be encountered until the Ferron Sandstone Member of the Mancos Shale is penetrated. The proposed program should be adequate for the task. A benign air or fresh water/polymer/gel mud system will be used to drill the well. No subsurface water rights are on file within a mile of the proposed well location.

Chris Kierst
APD Evaluator

9/13/2010
Date / Time

Surface Statement of Basis

Present for pre-site were: M. Jones (UDOGM), K. Gathings, T. Kazeck, D. Holmer, J. Hartley (APC), M. Ritt, C. Kastrinko (609 Consulting), Nicole Nielson (UDWR).

This location is proposed in a stand of pinion and juniper trees on a gently sloped bench. There is a small drainage that will need to be re-routed around the west side of the location adequately to keep runoff from washing out the pad and access road. DWR recommends big game winter restrictions from Dec. 1 to Apr. 15 and raptor restrictions from Jan. 1 to Aug. 31.

The pit ranking criteria ranks the location as "required" for a liner due to the gravelly nature of the subsurface soil.

Mark Jones
Onsite Evaluator

8/26/2010
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 12 mils 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.

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 8/25/2010

API NO. ASSIGNED: 43007500730000

WELL NAME: Helper State 33-4

OPERATOR: ANADARKO PETROLEUM CORP (N0035)

PHONE NUMBER: 720 929-6007

CONTACT: Kathy Schneebeck-Dulnoan

PROPOSED LOCATION: NWSE 04 140S 100E

Permit Tech Review:

SURFACE: 2601 FSL 2162 FEL

Engineering Review:

BOTTOM: 2601 FSL 2162 FEL

Geology Review:

COUNTY: CARBON

LATITUDE: 39.63736

LONGITUDE: -110.80409

UTM SURF EASTINGS: 516811.00

NORTHINGS: 4387318.00

FIELD NAME: HELPER

LEASE TYPE: 3 - State

LEASE NUMBER: ST UT ML-45804

PROPOSED PRODUCING FORMATION(S): FERRON COAL

SURFACE OWNER: 3 - State

COALBED METHANE: YES

RECEIVED AND/OR REVIEWED:

- PLAT**
- Bond:** STATE/FEE - 22013542
- Potash**
- Oil Shale 190-5**
- Oil Shale 190-3**
- Oil Shale 190-13**
- Water Permit:** City of Price
- RDCC Review:**
- Fee Surface Agreement**
- Intent to Commingle**

Commingle Approved

LOCATION AND SITING:

- R649-2-3.**
- Unit:**
- R649-3-2. General**
- R649-3-3. Exception**
- Drilling Unit**
- Board Cause No:** Cause 241-1A
- Effective Date:** 5/6/2010
- Siting:** 460' Fr Drl U Bdry & 920' Fr Other Wells
- R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations: 1 - Exception Location - bhill
5 - Statement of Basis - bhill
25 - Surface Casing - hmadonald



GARY R. HERBERT
Governor

GREGORY S. 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

Permit To Drill

Well Name: Helper State 33-4
API Well Number: 43007500730000
Lease Number: ST UT ML-45804
Surface Owner: STATE
Approval Date: 9/29/2010

Issued to:

ANADARKO PETROLEUM CORP, P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 241-1A. The expected producing formation or pool is the FERRON COAL Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

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

Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

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.

Conditions of Approval:

Surface casing shall be cemented to the surface.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Additional Approvals:

The operator is required to obtain 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

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 to the approved drilling program – contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail 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 801-538-5338 - office
801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the 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

Approved By:



Acting Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ST UT ML-45804
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.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: Helper State 33-4
2. NAME OF OPERATOR: ANADARKO PETROLEUM CORP	9. API NUMBER: 43007500730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 307-752-1169 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2601 FSL 2162 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 04 Township: 14.0S Range: 10.0E Meridian: S	9. FIELD and POOL or WILDCAT: HELPER COUNTY: CARBON STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 10/8/2010	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="BOP change"/>

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

Anadarko Petroleum Corporation (Anadarko) respectfully requests to change the BOP to be used to drill this well. The drilling rig secured requires a different BOP configuration than originally permitted; the substructure is too low to allow the standard 3000 psi double-valve BOP without hitting the rig floor. Based on historic data in Cardinal Draw and observed reservoir pressures, there are no over-pressured formations. All drilling is done with air/mist because the formations are underbalanced. This well coincides with the drilling program done in Cardinal Draw in June 2010 where Pense Drilling was the rig contractor; the same setup was used with BLM approval. The annular preventor can be fully closed in open hole conditions and tested to 1500 psi. Please see the attached for the revised BOP diagram. Please contact the undersigned with any questions and/or comments.

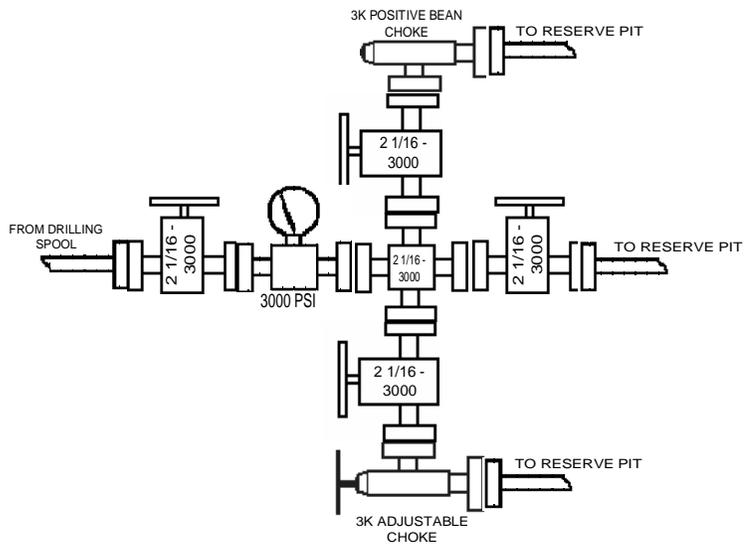
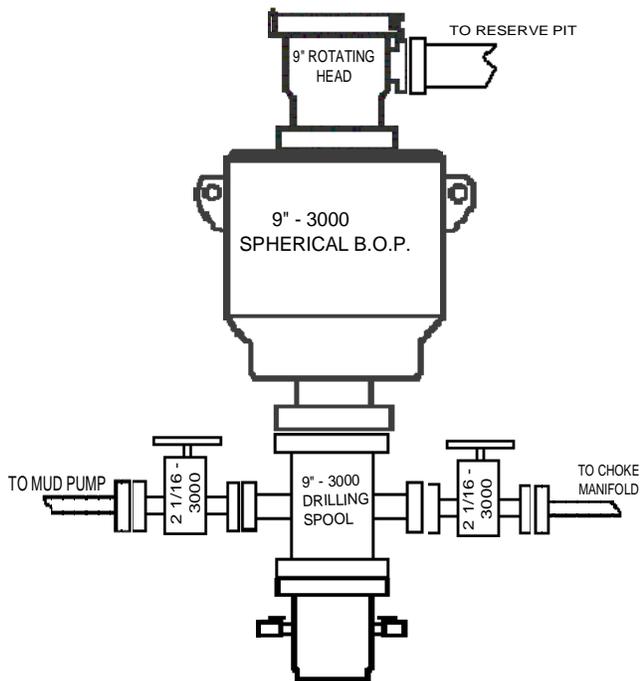
Approved by the Utah Division of Oil, Gas and Mining
 Date: October 06, 2010
 By: *Derek Duff*

Thank you.

NAME (PLEASE PRINT) Kathy Schneebeck-Dulnoan	PHONE NUMBER 720 929-6007	TITLE Staff Regulatory Analyst
SIGNATURE N/A	DATE 10/4/2010	

CARDINAL DRAW

9" - 3000 BOP



STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ST UT ML-45804
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.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: HELPER STATE 33-4
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43007500730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6515 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2601 FSL 2162 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 04 Township: 14.0S Range: 10.0E Meridian: S	9. FIELD and POOL or WILDCAT: HELPER COUNTY: CARBON STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 9/28/2013	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 50px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 All aspects of this APD shall remain the same.

**Approved by the
 Utah Division of
 Oil, Gas and Mining**

Date: 11/01/2011
By: 

NAME (PLEASE PRINT) Lauren Christiansen	PHONE NUMBER 720 929-6107	TITLE Regulatory Anayst
SIGNATURE N/A	DATE 10/27/2011	



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

December 7, 2012

Anadarko Petroleum Corporation
P.O. Box 173779
Denver, CO 80217

Re: APD Rescinded – Helper State 33-4, Sec. 4, T. 14S, R. 10E
Carbon County, Utah API No. 43-007-50073

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on September 29, 2010. On November 1, 2011 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective December 7, 2012.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
SITLA, Ed Bonner