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

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: UTU080563
6. SURFACE: Federal

1A. TYPE OF WORK: DRILL [X] REENTER ☐ DEEPEN ☐

7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

B. TYPE OF WELL: OIL ☐ GAS [X] OTHER_____ SINGLE ZONE [X] MULTIPLE ZONE ☐

8. UNIT or CA AGREEMENT NAME: N/A

2. NAME OF OPERATOR: Kerr-McGee Oil & Gas Onshore, LP

9. WELL NAME and NUMBER: Wellington Federal 31-18

3. ADDRESS OF OPERATOR: 1099 18th Street, Denver, CO 80202 (CITY / STATE / ZIP) PHONE NUMBER: 720-929-6000

10. FIELD AND POOL, OR WILDCAT: ~~Undesignated~~ Hupp / Ferron

4. LOCATION OF WELL (FOOTAGES) 523448X 4384695Y 39.613566
AT SURFACE: 752' FNL, 1860' FEL Lat: 39.613700 Long: -110.727533
AT PROPOSED PRODUCING ZONE: Same as above -110.726848

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE Lot 6 Sec. 18 T14S-R11E S.L.B.&M.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: Approximately 5.6 miles from Price, Utah

12. COUNTY: Carbon
13. STATE: UTAH

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 752' FNL

16. NUMBER OF ACRES IN LEASE: 1,946.06 ac.

17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 160 ac.

18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): Wellington Fed 11-18 +\- 2700'

19. PROPOSED DEPTH: 1800'

20. BOND DESCRIPTION: Utah Statewide Bond: RLB005238

21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5924' Ungraded Ground Level

22. APPROXIMATE DATE WORK WILL START: Upon APD Approval

23. ESTIMATED DURATION: 5 days drilling plus 9 days completion

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
11"	8-5/8", 24#, J-55, ST&C	180'	77 sks of Class "A" cement w/ 0.25#/sk LCM & 2% CaCl2,
			mixed @ 15.6 ppg, 1.19 cuft/sk yield w/ 100% excess by volume,
			enough volume to raise cmt to surface.
7-7/8"	5-1/2", 15.5#, J-55, LT&C	1800'	102 sks of Class "A" cement w/ 0.25#/sk LCM & 2%CaCl2,
			mixed at 12.5 ppg, 2.03 cuft/sk yield w/ 10% excess.
			Volumes calculated to circulate from TD to 700' above Ferron
			formation with 10% excess by caliper log.

25. ATTACHMENTS

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

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

NAME (PLEASE PRINT) Debby J. Black (Debby.Black@anadarko.com) TITLE Staff Regulatory Analyst (Direct 720-929-6472)

SIGNATURE Debby J. Black DATE March 19, 2008

(This space for State use only)

Approved by the Utah Division of Oil, Gas and Mining

RECEIVED APR 04 2008 DIV. OF OIL, GAS & MINING

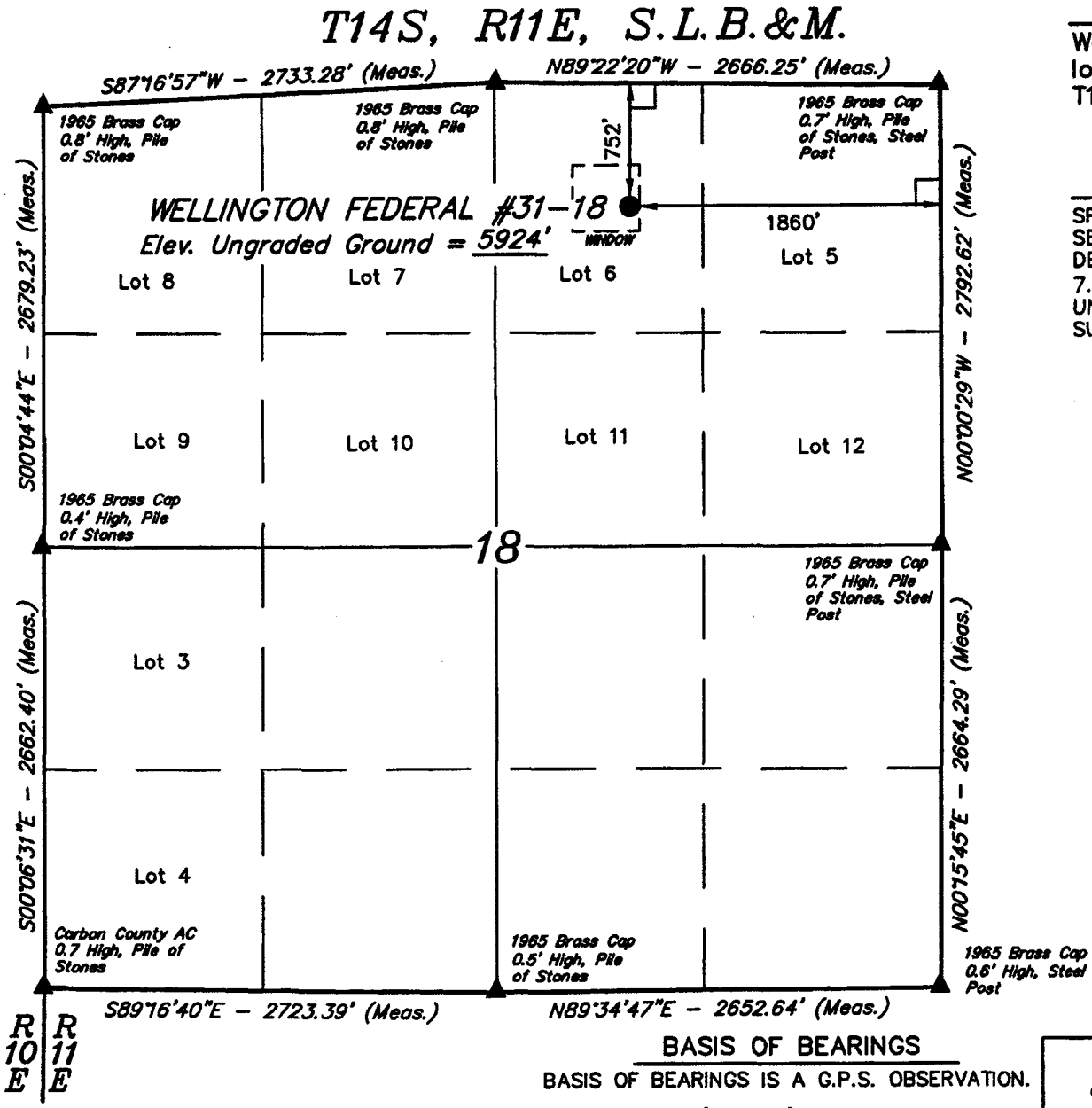
API NUMBER ASSIGNED: 43-007-31389

APPROVAL: Date: 04-09-08 By:

(11/2001) Federal Approval of this Action is Necessary

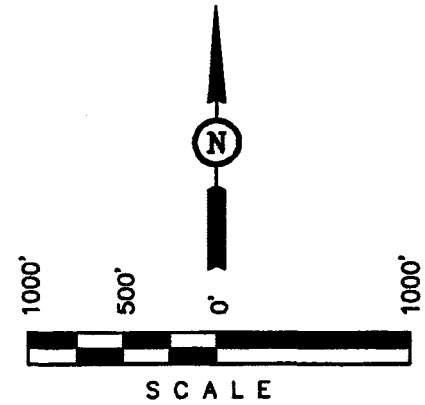
Kerr-McGee Oil & Gas Onshore LP

Well location, WELLINGTON FEDERAL #31-18, located as shown in LOT 6 of Section 18, T14S, R11E, S.L.B.&M., Carbon County, Utah.



BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE NORTHWEST CORNER OF SECTION 7, T14S, R11E, S.L.B.&M. TAKEN FROM THE DEADMAN CANYON, QUADRANGLE, UTAH, CARBON COUNTY 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5997 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
ROBERT L. KAY

BASIS OF BEARINGS

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

(NAD 83)
LATITUDE = 39°36'49.32" (39.613700)
LONGITUDE = 110°43'39.12" (110.727533)
(NAD 27)
LATITUDE = 39°36'49.45" (39.613736)
LONGITUDE = 110°43'36.55" (110.726819)

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: 09-04-07	DATE DRAWN: 09-07-07
PARTY B.B. K.D. L.K.	REFERENCES G.L.O. PLAT	
WEATHER HOT	FILE Kerr-McGee Oil & Gas Onshore LP	

2008 Cardinal Draw Plan of Development
Carbon County, Utah
OPERATOR: KERR-McGEE OIL & GAS ONSHORE, L. P.

Federal Lease: UTU-080563

Wellington Federal 31-18

NWNE Lot 6, Section 18: Township 14 South - Range 11 East
Carbon County, Utah

	Setting Depth-KB	Sacks	Top of Ferron	Total Depth	Anticipated Bottom Hole Pressure
8-5/8", 24# Casing	180'	77			
5-1/2", 15.5# Casing	1800'	102	1440'	1800'	774

DRILLING PROGNOSIS FOR PRODUCTION WELLS

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

	Shallowest Depth		Deepest Depth	
Formation	Measured	Sub Sea	Measured	Sub Sea
Ferron	760	4850	780	4850
B Ferron	1130	3940	2154	4540
Tunnunk Shale	830	4150	2154	4540
TD	1380		2404	

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

Primary Objective:	Tunnuck Shale	Methane Gas
Secondary 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 700' above the Ferron unless water is encountered.

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 Moab and Price BLM offices 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 on 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. 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 handle, floor safety valve and wireline-retrievable float valves.

4. SUPPLEMENTARY INFORMATION

As this is a normally pressured coalbed methane play, no gas is anticipated to surface during drilling operations. Surface casing will be preset with a water-well drilling rig (3D) and production casing will be set with a turnkey operator (Pence). Kerr-McGee will have a company hand on location for all operations. This is done to minimize rig time on location.

5. CASING PROGRAM:

Hole Size	Casing Size	Weight	Grade	Joint	Depth Set	New/Used	Collapse	Burst	Tension
11"	8-5/8"	24	J-55	ST&C	240	New	1,370	2,950	244,000
7-7/8"	5-1/2"	15.5	J-55	LT&C	2400	New	4,040	4,810	217,000

Conductor pipe will not be utilized on production wells in Cardinal Draw

Surface Casing:

a) Burst = 0.052 * MW * TVD
= 0.052 * 8.33 ppg * 2139'
= 1040 psi
Safety Factor = Rating/Burst
= 2950/112
= 3

b) Collapse = [0.052 * MW * TVD(shoe)]
= [.052 * 9.0 ppg * 240']
= 112 psi
Safety Factor = Rating/Collapse
= 1370/88
= 12

c) Tension = Weight * TVD * [1 – (MW/65.5ppg)] + Margin of Overpull
= 24 * 240' * [1 - 9.0/65.5] + 50,000
= 54969 lbf
Safety Factor = Rating/Tension
= 244,000/4,969
= 4

Surface casing shall have a centralizer on every joint.

Production Casing:

a) Burst = 0.052 * 8.33 ppg * 2400' (Evacuated Casing)
= 1040 psi
Burst = (1.45 psi/ft - 0.44 psi/ft) * TVD (Fracture Pressure)
= 2424 psi
Safety Factor = Rating/Burst
= 4810/1041
= 5
= 4810/2424
= 2

b) Collapse = [0.052 * 8.33 ppg * 2400']
= 1040 psi
Safety Factor = Rating/Collapse
= 4040/1040
= 4

c) Tension Weight = 15.5 lbs/ft * 2400'* [1-(8.33 ppg/65.5 ppg)] + Margin of Overpull
= 15.5 lbs/ft * 2400'* 0.873+50,000
= 54731 lbf
Safety Factor = Rating/Tension
= 217,000/32,530
= 4

6. DRILLING FLUIDS PROGRAM:

Surface:

Kerr-McGee intends to drill the surface casing through to 10% of total depth using fresh water and gel sweeps. No gas or water zones will be encountered and as such BOPE will not be used.

Production:

Drilling of the production hole to casing setting depth will be done with air as the drilling fluid. While drilling in an underbalanced state, Kerr-McGee and/or its turnkey contractor will maintain sufficient barite and lost-circulation materials on location to kill water flows and contain gas production if deemed necessary. These materials will not be pre-mixed, but the ability to mix and pump them will be present on location.

Kerr-McGee requests a variance from Onshore Order 2 with regards to the 100 foot blooey line. The length of the blooey line will be sufficient to reach the middle of the reserve pit. Since gas flow is not anticipated to surface, there will not be an ignition device. In the event that gas does flow to surface, a continuous ignition system will be installed and utilized on all remaining and subsequent wells drilled. Air flow line is 8" 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 pipes to disperse cuttings to reserve pit. Dust will be suppressed by injecting water into the blooey line. Whip-checks will also be utilized on all pressurized compressors, blooey lines and hoses to maintain physical control. Fire extiguishers will be placed around location.

The open hole will be loaded with water and a micro-emulsion agent prior to tripping out of the hole to run wireline logs and case.

7. CEMENTING PROGRAM:

8-5/8" Surface Casing:

Tail: Class "A" Cement with 0.25#/sk LCM and 2% $CaCl_2$, mixed at 15.6 ppg, 1.19 cuft/sk yield with 100% excess by volume.

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:

Tail: Class "A" Cement with 0.25#/sk LCM and 2% $CaCl_2$, mixed at 12.5 ppg, 2.03 cuft/sk yield with 10% excess. Volumes calculated to circulate cement from TD to 700' above the Ferron formation with 10% excess by caliper log.

Centralizers will used used to maintain a minimum of 70% Casing-Sidewall Standoff

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:

	From	To
GR	TD	Surface - if needed
Resistivity	Surface Casing	TD
Neutron-Density-Cal	Surface Casing	TD
High Res Pass	Surface Casing	TD

9. PRESSURE DATA, POTENTIAL HAZARDS

Bottom hole is anticipated to be normally pressured.
There is no history of hydrogen sulfide gas in the area and none is anticipated.

10. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS:

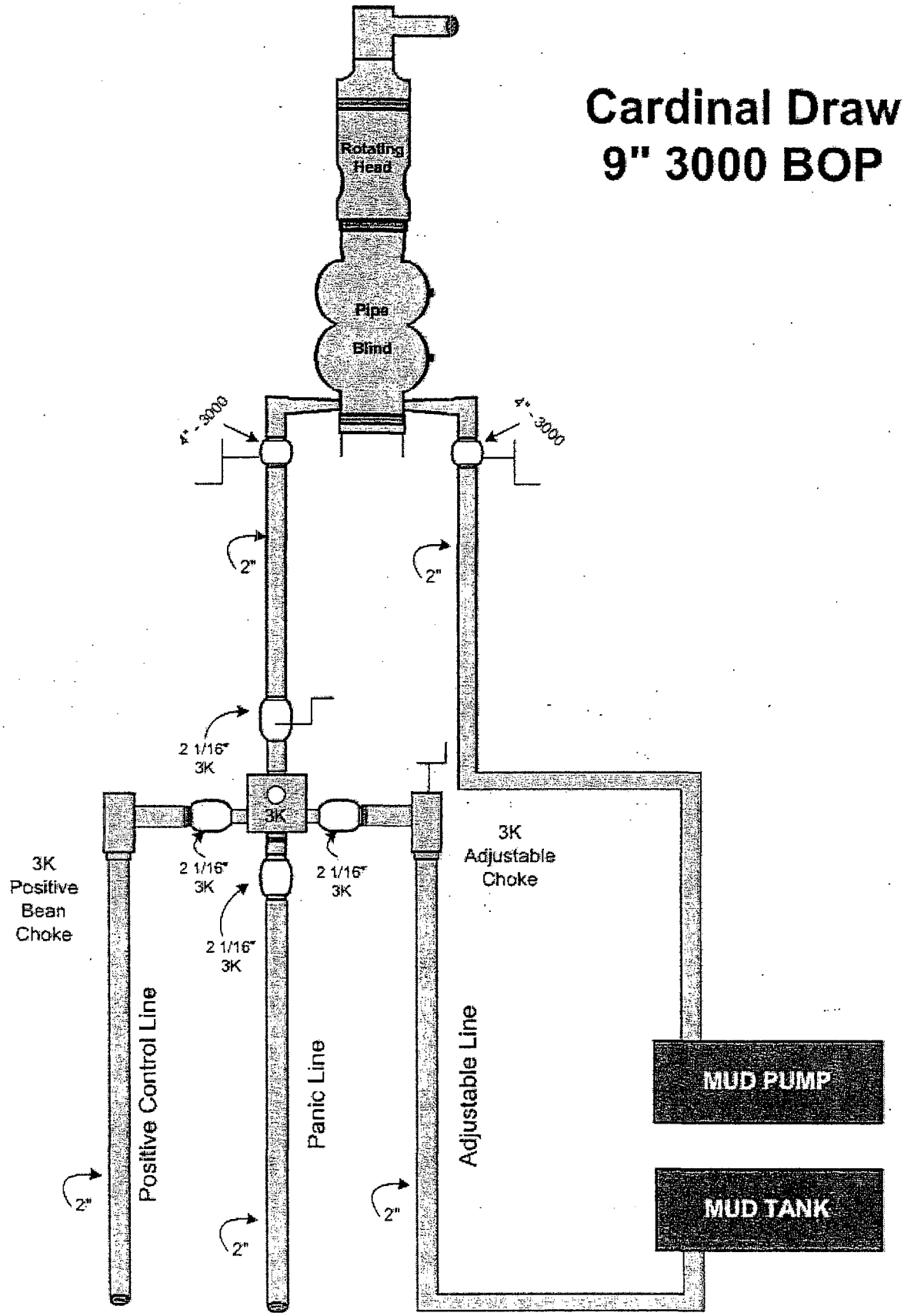
a) Anticipated Days:

Drilling Days:	Approximately 5 Days/Well
Completion Days:	Approximately 2 Days/Well
Testing Days:	Approximately 7-14 Days/Well

b) Notification of Operations:

Surface	**Sub-Surface**
Bureau of Land Management	Bureau of Land Management
Price Field Office	Moab Field Office
125 South 600 West	82 East Dogwood
Price, Utah 84501	Moab, Utah 84532
(435) 636-3600	(435) 259-2100
Attn: Nathan Sill, NRS	Attn: Eric Jones, Senior Engineer

Cardinal Draw
9" 3000 BOP



CERTIFICATION STATEMENT

WELL NAME: Wellington Federal 31-18

LEASE NO.: UTU-080563

I hereby certify that I, or person under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with operations herein will be performed by Pense Brothers Drilling Company, Inc., Xtreme Coil Drilling Corp., and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Name and Title _____

Grant Schluender/ Drilling Engineer

Dated this 19th day of March, 2008.

Kerr-McGee Oil & Gas Onshore LP
Wellington Federal 31-18
752' FNL 1,860' FEL (NW/4 NE/4)
Section 18 Township 14 South – Range 11 East
SLB&M
Carbon County, Utah
Federal Lease: UTU080563

SURFACE USE PLAN OF OPERATIONS

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents. This NOS process included an on-site meeting on December 17-19, 2007 prior to the submittal of the application, at which time the specific concerns of Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) and the BLM were discussed. Specific concerns of the BLM representatives are addressed herein, as are specific stipulations from the BLM.

* Specific stipulations arising from the on-site meeting are shown as starred.

WELL LOCATION AND INTRODUCTION:

The proposed location is at 752' FNL 1,860' FEL of Section 18, T14S R11E, SLB&M. The well site was surveyed and staked at a geologically preferable location by Uintah Engineering & Land Surveying (UELS).

An NOS was submitted to BLM in Moab, Utah on October 21, 2007 for this location. An on-site meeting was held on December 17-19, 2007. Present were: Nathan Sill – BLM, Price; Jim Hartely, Gina Becker, and Tom Richardson – Kerr-McGee; Nick Hall – Grasslands Consulting; Chuck Bollong – SWCA; Uintah Engineering and Land Surveying; and Keith Dana – Dana Consulting.

DIRECTIONS TO LOCATION
From Price, Utah, go easterly then southeasterly on Highway 6 (East Main Street) to East Old Wellington Road. Turn left (east) onto East Old Wellington Road, and continue east and then southeast to South Old Wellington Road. Turn left (north) on South Old Wellington Road and continue on the road as it curves northeast and then north for approximately 1.2 miles to North Coal Creek Road. Turn right (west) on North Coal Creek Road for approximately 0.2 miles to the beginning of the proposed access road for Wellington Federal 11-19. Turn left (north) on this proposed access road and transverse for approximately 0.9 miles (6,864') to an existing two-track road to the northeast. Turn right (east) and proceed in a northeasterly, then northwesterly direction for approximately 2.0 miles to the beginning of the proposed access road for this well. Continue in a northeasterly direction for approximately 300'to the proposed well pad.

1) EXISTING ROADS
- A) The well is a development well.
- B) Existing roads within 1 mile consist of a two-track trail within 0.06 miles of location.

C) Plans for improvement and/or maintenance of existing roads are to be maintained in as good or better conditions then at present and said maintenance will continue until final abandonment and reclamation of this drilling location.

2) **PLANNED ACCESS ROADS** (See Topos A, B, and D)

±300' (0.06 miles) – Total new road construction for access road, Sec. 18 – Federal, on lease

±2,640' (0.5 miles) – Upgrade existing two-track trail, connecting to existing two-track trail from Wellington Federal 23-18, Sec. 18 – Federal, on lease

±1,214' (0.23 miles) – Total new road construction for proposed loop road, Sec. 18 – Federal, on lease.

±1,800' (0.34 miles) – Total new road construction for proposed loop road, Sec. 7 – Federal, off lease.

±1,200' (0.23 miles) – Total new road construction for proposed loop road, connecting to Wellington Federal 13-08, Sec. 8 – Federal, off lease.

The least three segments of road will form a loop road, as discussed at the on-site meeting, to ease access in and around the field.

This Application for Permit to Drill (APD) can serve as a request for BLM to initiate a Right of Way (ROW) application for access roads and water haul routes, if necessary. This ROW can continue up to the wellhead.

A) Running surface will be crowned/ditched with a running surface ±16' and the total disturbed width to be ±50'. 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.

B) Borrow ditches to be back sloped 3:1 or shallower.

C) Maximum grades will not exceed BLM standards.

D) Culverts and low-water crossings will be installed as needed prior to drilling. Drainage to consist of borrow ditches on both sides and "wind ditches" as appropriate. Riprap will be placed at the inlet and outlet at the culvert adjacent to the wellpad. Low water crossings may be used during drilling and upon completion if conditions dictate. Culverts will be installed prior to commencement of drilling operations. The borrow ditches along the proposed access road will be re-seeded if the well is completed as a producer. The reseeding of the borrow ditches will reduce the area utilized by this location.

E) Surfacing material to consist of native material from borrow ditches. Road will be gravel surfaced. Gravel will be hauled by truck from a licensed facility.

F) No major road cuts are necessary.

G) Fence cuts, gates and/or cattle guards will be installed as necessary.

H) Upgrade and maintain access roads as necessary to prevent solid erosion and accommodate year-round traffic.

I) All equipment and vehicles will be confined to the access road, pad, and areas specified in the APD.

J) The proposed access road will be constructed in accordance with roading guidelines established for oil and gas exploration and development activities as referenced in the joint BLM/USFS publications: Surface Operating Standards for Oil & Gas Exploration and Development. Third Edition and/or BLM Manual Section 9113 concerning road

for the operator. The dirt contractor, or drilling/completion foremen whose primary expertise is not in construction, do not qualify as construction supervisors.

K) Construction activity shall not be conducted using frozen or saturated solid material or during periods when significant watershed damage (e.g. rutting, extensive sheet soil erosion, formation of rills/gullies, etc.) is likely to occur.

L) Vegetative debris is not permitted in or under fill embankments.

3) LOCATION OF EXISTING WELLS

Within a 1-mile radius:

Proposed:	7
Drilling/injection:	None
Shut-In:	None
Producing:	3

LOCATION OF EXISTING PRODUCING FACILITIES OPERATED BY *Kerr-McGee Oil & Gas Onshore LP*

Within one mile: None

4) NEW PRODUCTION FACILITIES PROPOSED

A) BLM will be contacted prior to construction of production facilities. A Sundry Notice (SN) will be filed if requested by BLM.

B) Meter houses are skid mounted. A pump house may be installed if needed. Flow lines will be buried alongside or under the access road. Electric power will be buried wires and poles, also installed alongside the access road. Both will be within the corridor as surveyed by the archaeologist. Any changes from this plan will be submitted to the BLM Field Office by Sundry Notices. New flow lines will connect with existing flow lines, produced fluid will be piped to the existing tank battery.

B) Dimension of Proposed Facility is 260' x 215' or less (55,900 ft^2) for drilling operations. Total disturbance will be approximately 1.28 acres.

C) Site preparation for production will be done with standard excavation equipment using native materials. Additional surface material will be obtained from commercial sources or the approved borrow area. Production facilities (including dikes), if used, must be placed on the cut portion of the location and a minimum of 15 feet from the toe of the back cut.

D) Production equipment will be painted light reflective colors to limit evaporation and waste of liquid hydrocarbons, per BLM specifications.

All permanent above-the-ground structures, tank batteries, etc. if used, that will remain longer than six (6) months will be painted Olive Black, or as specified by BLM. The exception being that Utah Occupation Health and Safety Act Rules and Regulations are to be complied with where special safety colors are required.

E) Production facilities are planned on location, and may vary according to actual reservoir discovered and will be engineered upon completion of well tests. Production facilities will be clustered and placed away from cut slopes and fill slopes to allow the maximum recontouring of cut and fill slopes.

If used, a dike will be constructed completely around the production facilities (e.g. production tanks, water tanks, and/or heater-treater). The dikes for the production facilities must be constructed of compacted subsoil, hold the capacity of the largest tank, and be independent of the back cut. Any production pits will be fenced.

If the well is a producer, all production facilities not listed herein will be authorized by Sundry Notice.

F) No facilities will be constructed off location except as noted in paragraph A) above.

G) Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area, back sloping and contouring all cut and fill slopes to the surrounding topography. No depressions will be left that trap water or form ponds. These areas will be re-seeded. Refer to plans for restoration of surface for additional details.

H) Pits which contain oil, if used, will be overhead flagged. None are planned at this time.

I) Proposed utility corridor information:

This Application for Permit to Drill (APD) can serve as a request for BLM to initiate a Right of Way (ROW) application for access roads and water haul routes, if necessary. This ROW can continue up to the wellhead.

The proposed utility corridor consists of approximately 0.8 total miles (±4,224') of right-of-way (ROW) on Fed lands, coming from the existing utility corridor for the Wellington Federal 13-08.

The following items will be in one trench on one side of the access road:
- A gas transportation pipeline
- A produced water transportation pipeline

On the opposite side of the access road, the power supply (12470 volt power) for the well will be buried.

The gas transportation pipeline would transport recovered gas from this well to an existing interconnect with the existing pipeline infrastructure. The existing pipeline is operated by Kerr-McGee, and the proposed pipeline will be constructed by Kerr-McGee.

The utility corridor alignment will be located adjacent to the proposed access road ROW between this well and the existing portion of access road.

This utility corridor will begin at this well, then traverse northeasterly approximately 4,224' to the existing utility corridor for the Wellington Federal 13-08.

Ownership of the ROW to be utilized is as follows:

T14S R11E Sec. 18	Fed, on lease	±1,214'	±0.23 miles
T14S R11E Sec. 7	Fed, off lease	±1,800'	±0.34 miles
T14S R11E Sec. 8	Fed, off lease	±1,200'	±0.23 miles

<u>TOTAL LENGTH - NEW CONSTRUCTION TO BE UTILIZED ON FED LANDS ROW – ±0.8 MILES</u>

The utility corridor pipeline ROW will be in the existing transportation ROW with minimal disturbance. Construction equipment will utilize the access road as much as possible. The ROW will consist of a 70' total width. The actual right of way will include a 50' width from the centerline of the road to the outside edge of the access road ROW as surveyed by the archeologist.

The gas gathering pipeline construction specifications are as follows:

Gas transportation pipeline:

Diameter:	6.963" AID (8" nominal)
Wall Thickness:	0.784"
Grade	SDR 11
Design Pressure:	100 psig
Actual Pressure:	60-95 psig
Pressure Test Fluid:	Air
Pipeline Depth:	36"-48"

The water gathering pipeline construction specifications are as follows:

Water gathering pipeline:

Diameter:	6" (nominal)
Wall Thickness:	1.472"
Grade	SDR 9
Design Pressure:	100 psig
Actual Pressure:	60-95 psig
Pressure Test Fluid:	Air
Pipeline Depth:	36"-48"

The allocation and sales meters will be located in the immediate vicinity of the wellhead unless other wise modified by a Sundry Notice.

i) Pipeline shall be constructed as shown on the attached map and plat. Graders shall be used to construct or to clear the pipeline ROW wherever feasible. Angle dozers would be used if terrain dictates. The ROW shall not be cleared more than an additional fifty (50) feet wide (preferably five (5) feet wide on the soil stockpile side, and twenty (20) feet wide on the working side of the trench minimum) without approval. Bladed materials shall be placed back into the cleared route once construction is completed. Pipeline to be welded and dragged with a dozer into place. Alternatively, certain portions of the pipeline may be constructed by laying pipe in the existing road borrow ditch, picking the pipe up with side boom cats, then welding and placing along side of the road. All construction will be with as little surface disturbance as possible.

ii) Pipeline construction shall not block nor change the natural course of any drainage. Trenches will be dug with 1-4 backhoes; the number is subject to availability at the time of construction. A trencher would be used only if the backhoes are not available. Suspended pipelines, which are not currently anticipated but if needed, shall provide adequate clearance for maximum runoff.

ii) Pipeline trenches shall be compacted at road crossings during backfilling. Pipeline trenches shall be maintained in order to correct settlement and erosion. Road crossings will be trenched to a depth of five (5) feet prior to placing the pipeline in the trench. Following the placement of the pipeline into the trench all open road cuts will backfilled and compacted in order to maintain the integrity of the existing road.

iii) The pipeline will be tested with air prior to filling the trench.

iv) Minimal water will be needed as this well will be air-drilled. When water is needed, it will be obtained from the city of Price.

Water requirements are anticipated to be minimal or less than approximately 10,814 bbls (454,188 gallons or 1.40 acre-feet).

v) All above ground permanent structures including production equipment (valving and piping, etc.) will be painted a non-contrasting color to blend harmoniously with the surrounding landscape, as specified by BLM.

vi) Topsoil, as available, will be removed prior to pipeline construction from along the working side of the pipeline ROW and stockpiled for future reclamation. Topsoil depth of 6" to be removed as stipulated by BLM.

vii) Pipeline markers will be installed where appropriate.

viii) Pipeline construction is anticipated to be approximately three (3) to six (6) weeks.

ix) Anticipated equipment area as follows:
Wellington Federal 44-6, SE/4 SE/4 Sec. 6 T14N R11E. This is an existing SWD well, and the storage area is covered under BLM ROW UTU-079503

x) Anticipated full time personnel are as follows:
1 – Supervisor
1 – Pipeline supervisor
3 – Trenching crew (welders with helpers)
3 – Trucks
3 – Dozer, Track hoe, Blade
Part-time technical support persons will be on-site from time to time as necessary.

xi) Waterbars are to be constructed at least one (1) foot deep, on the contour with approximately two (2) feet of drop per 100 feet of waterbar to ensure drainage, and extended into established vegetation.
All waterbars are to be constructed with the berm on the downhill side to prevent the soft material from silting in the trench. The initial waterbar should be constructed at the top of the backslope. Subsequent waterbars should follow the following general spacing guidelines:

% SLOPE	SPACING INTERVAL (feet)
2 or <	200
2 - 4	100
4 - 5	75
5 or	50

5) LOCATION OF WATER SUPPLY

A) Minimal water will be needed as this well will be air-drilled. When water is needed, it will be obtained from the city of Price.

B) Anticipated water use is as follows:
Air drilling will be used, so the mud drilling water requirements will be minimal, if any.

6) SOURCE OF CONSTRUCITON MATERIALS

A) Construction materials will consist of native materials from borrow ditches and location areas.

B) Surfacing materials will be obtained form available permitted sources, if needed, and consist of pit gravel. Gravel will be hauled by truck from a licensed facility.

7) WASTE DISPOSAL

A) Drill cuttings will be buried in reserve pit when dry.

B) Drilling fluid will be evaporated and then buried in the reserve pit when dry.

C) Reserve pit layout is illustrated on Figures 1 and 2.

* D) Reserve pit will be lined with a synthetic liner 12 mil or thicker. The reserve pit liner shall be made of any manmade synthetic material of sufficient size and qualities to sustain a hydraulic conductivity no greater than 1×10^{-7} cm/sec after installation and which is sufficiently reinforced to withstand normal wear and tear associated with the installation and pit use thereof. The liner shall be chemically compatible with all substances that may be put into the pit.

E) Reserve pit will be fenced on three sides during drilling operations, and on fourth side at time of rig release. Pit will remain fenced until backfilled.

* F) If used, a flare pit for air drilling will be located minimum 100' from wellbore.

G) Produced fluid will be contained in test tanks during completion and testing.

* H) Sewage disposal facilities will be in accordance with State and Local Regulations. Sewage may not be buried on location or put in a borehole. Utah Department of Environmental Quality (UDEQ) Regulations prevent this unless a UDEQ Permit is obtained.

* I) Garbage and other waste - burnable waste will be contained in a portable trash cage which will be totally enclosed with small mesh wire. Cage and contents will be transported to and trash dumped at a WDEQ approved Sanitary Landfill upon completion of operations.

J) Trash will be picked up if scattered and contained in trash cage as soon as practical after rig is moved off.

K) Upon release of the drilling rig, rathole and mousehole will be filled. Debris and equipment not required for production will be removed.

8) ANCILLARY FACILITIES

No ancillary facilities will be necessary.

9) WELLSITE LAYOUT(See Figures 1 and 2)

Note: Bureau of Land Management will be contacted prior to reserve pit construction and provided an opportunity to inspect the pit prior to filling with water.

A) See attached drill site plat and cut/fill diagram.

B) Roads and well production equipment, such as tanks, treaters, separators, vents, electrical boxes, and equipment associated with pipeline operation, will be placed on location so as to permit maximum interim reclamation of disturbed areas. If equipment is found to interfere with the proper interim reclamation of disturbed areas, the equipment may be moved so proper recontouring and revegetation can occur.

C) If there is snow on the ground when construction begins, the operator will remove it before the soil is disturbed, and pile it downhill from the topsoil stockpile location.

D) Both backslope and foreslope will be constructed no steeper than 1½:1.

E) Erosion control measures will be applied pursuant to Kerr-McGee's General Permit to Discharge Stormwater under the Utah Pollutant Discharge Elimination System and accompanying Stormwater Pollution Prevention Plan.

10) SURFACE PREPARATION

(General)

A) Salvaging and spreading topsoil will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment. If such equipment creates ruts in excess of four (4) inches deep, the soil will be deemed too wet.

B) Earthwork for interim and final reclamation must be completed within six (6) months of well completion or plugging (weather permitting).

C) In areas that will not be drill-seeded, the seed mix will be applied and fertilized per BLM's Conditions of Approval (COAs).

D) No seeding will occur from May 15 to September 15. Fall seeding is preferred and will be conducted after September 15 and prior to ground freezing. Spring seeding will be conducted after the frost leaves the ground and no later that May 15.

E) Annual or noxious weeds shall be controlled on all disturbed areas as directed by the Field Office Manager. An intensive weed monitoring and control program will be implemented beginning the first growing season after interim and final reclamation. Noxious weeds that have been identified during monitoring will be promptly treated and controlled. A Pesticide Use Proposal (PUP) will be submitted to the BLM for approval prior to the use of herbicides. All reclamation equipment will be cleaned prior to use to reduce the potential for introduction of noxious weeds or other undesirable non-native species. The operator will coordinate all weed and insect control measures with state and/or local management agencies.

F) Reclaimed areas will be monitored annually. Actions will be taken to ensure that reclamation standards are met as quickly as reasonably practical.

G) Reclamation monitoring will be documented in an annual reclamation report submitted to the AO by December 31. The report will document compliance with all aspects of the reclamation objectives and standards, identify whether the reclamation objectives and standards are likely to be achieved in the near future without additional actions, and identify actions that have been or will be taken to meet the objectives and standards. The report will also include acreage figures for: Initial Disturbed Acres; Successful Interim Reclaimed Acres; Successful Final Reclaimed Acres. Annual reports will not be submitted for sites approved by the AO in writing as having met interim or final reclamation standards. Any time 30% or more of a reclaimed area is redisturbed, monitoring will be reinitiated.

H) The AO will be informed when reclamation has been completed, is successful, and the site is ready for final inspection.

INTERIM RESTORATION (Production)

A) Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area, back sloping and contouring all cut and fill slopes. These areas will be re-seeded.

B) Wellpad size will be reduced to minimum size necessary to conduct safe operations. Cuts and fills will be reduced to 3:1 or shallower.

C) Reserve pits will be closed and backfilled as soon as the pit contents are dry enough to do so, or no later than the end of the next full summer following rig release, whichever comes first, to allow sufficient time for the pit contents to dry. Reserve pits remaining open after this period will require written authorization of the Authorized Office (AO). Immediately upon well completion, any hydrocarbons or trash in the reserve and flare pits will be removed. Pits will be allowed to dry, be pumped dry, or solidified in-situ prior to backfilling.

D) Following completion activities, pit liners will be buried to prevent their reemergence to the surface and interference with long-term successful revegetation. If it was necessary to line the pit with a synthetic liner, the pit will not be trenched (cut) or filled (squeezed) while containing fluids. When dry, the pit will be backfilled with a minimum of five (5) feet of

soil material. In relatively flat areas, the pit area will be slightly mounded to allow for settling and to promote surface drainage away from the backfilled pit.

E) The portions of the cleared well site not needed for operational and safety purposes will be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Sufficient level area will remain for setup of a workover rig and to park equipment. In some cases, rig anchors may need to be pulled and reset after recontouring to allow for maximum interim reclamation.

* F) Topsoil will be evenly respread and aggressively revegetated over the disturbed area not needed for all-weather operations back to the rig anchors, including road cuts and fills and to within a few feet of the production facilities, unless an all-weather, surfaced, access route or small "teardrop" turnaround is needed on the well pad.

G) Initial seedbed preparation will consist of backfilling, leveling, and ripping all compacted areas. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding. Seeding will be conducted no more than 24 hours following completion of final seedbed preparation. A certified weed-free seed mix designed by BLM (shown below) to meet reclamation standards will be used. The seed mix will be used on all disturbed surfaces including pipelines and road cut and fill slopes.

H) To help mitigate the contrast of recontoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, debris, and rock over recontoured cut and fill slopes.

* I) A proposed seed mixture for this location in Wyoming big sagebrush habitat is:

Indian ricegrass (Nezpar)	*Achnatherum hymenoides*	2.0
Squirreltail	*Elymus elymoides*	2.0
Needle and thread grass	*Stipa Comata*	2.0
Western wheatgrass	*Pascopyrum smithi*	2.0
Gooseberryleaf globemallow	*Sphaeralcea grossulariifolia*	0.5
Palmer penstemon (cedar)	*Penstemon palmeri*	0.5
Wyoming big sagebrush	*Artemisia tridentata* ssp. *wyomingensis*	0.5
Antelope bitterbrush	*Purshia Tridentata*	1.0
		10.5

J) Reclamation will be considered successful if the following criteria are met, or as specified by BLM:

· 70 percent of predisturbance cover
· 90 percent dominate species *
· Erosion features equal to or less than surrounding area

* The vegetation will consist of species included in the seed mix and/or occurring in the surrounding natural vegetation.

FINAL RESTORATION (P & A – Removal of equipment)

A) Flowlines on location will be removed before site reclamation and all flowlines between the wellsite and production facilities will remain in place and will be filled with water.

B) If necessary to ensure timely revegetation, the pad will be fenced to BLM standards to exclude livestock grazing for the first two growing seasons or until seeded species become firmly established, whichever comes later. Fencing will meet standards found on page 18 of the Gold Book, 4th Edition, or will be fenced with operational electric fencing.

C) Revegetation will be accomplished by planting mixed grasses as specified below. Revegetation is recommended for road area as well as around production site.

* D) A proposed seed mixture for this location in Wyoming big sagebrush habitat is:

Indian ricegrass (Nezpar)	*Achnatherum hymenoides*	2.0
Squirreltail	*Elymus elymoides*	2.0
Needle and thread grass	*Stipa Comata*	2.0
Western wheatgrass	*Pascopyrum smithi*	2.0
Gooseberryleaf globemallow	*Sphaeralcea grossulariifolia*	0.5
Palmer penstemon (cedar)	*Penstemon palmeri*	0.5
Wyoming big sagebrush	*Artemisia tridentata* ssp. *wyomingensis*	0.5
Antelope bitterbrush	*Purshia Tridentata*	1.0
		10.5

E) Initial seedbed preparation will consist of backfilling, leveling, and ripping all compacted areas. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding. Seeding will be conducted no more than 24 hours following completion of final seedbed preparation. A certified weed-free seed mix designed by BLM (shown below) to meet reclamation standards will be used. The seed mix will be used on all disturbed surfaces including pipelines and road cut & fill slopes.

* F) Distribute topsoil, if any remains, evenly over the location, and seed according to the above seed mixture. If needed the access road and location shall be ripped or disked prior to seeding. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.

G) All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends indistinguishably with the surrounding landscape. Resalvaged topsoil will be spread evenly over the entire disturbed site to ensure successful revegetation. To help mitigate the contrast of recontoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, woody debris, and large rocks over recontoured cut and fill slopes.

H) BLM will not release the operator's bond until the area has been successfully reclaimed (evaluation will be made after the first growing season) to the standards of the surface owner or surface management agency.

I) An above-round tubular metal dry-hole marker will be erected over the drill-hole upon cessation of drilling and/or testing operations. The marker will be inscribed with the operator's name, well number, well location, and federal lease number. Upon request of the surface owner, the casing may be cut off three (3) feet below reclaimed ground surface (or below plow depth) with a metal plate affixed to the top providing the same well information as stated above. This must consist of a piece of pipe not less than four inches in diameter and ten fee in length, of which four feet shall be above the general

ground level and the remainder being imbedded in cement. The tope of the pipe must be closed by a welded or screw cap, cement or other means.

J) The Area Manager, Bureau of Land Management, Price Field Office, will be contacted if there are any questions concerning the above rehabilitation stipulations (435) 636-3600 is the BLM contact for this location. All rehabilitation work, including seeding, will be completed by a certified contractor if the well is a dry hole.

11) SURFACE OWNERSHIP

Surface Owner

Drillsite/Access

Bureau of Land Management — Sec. 18, Sec. 7, Sec. 8
Price Field Office
125 South 600 West
Price, UT 84501 Phone: 435-636-3600

12) GENERAL INFORMATION

A) The project area is situated within the Colorado Plateau physiograhic province, in the lowlands that encircle the northern edge of the San Rafael Swell. The Price River drainage (Castle Valley) is located to the west and south of the project area; the Coal Creek drainage is located to the east of the project area, and confluences with the Price River south of the project area near the town of Wellington.

B) Topographic and geologic features – poorly bedded mixture of silt, sand, pebbles, cobbles, and boulders derived from adjacent uplands formed by the Book Cliffs.

C) Soil characteristics – clay loam.

D) Flora consists of: Big sagebrush, Juniper, Morman tea, Broom snakeweed (Matchbrush), Crested wheatgrass and Cheatgrass.

E) Fauna – none observed. Typically present: deer, elk, antelope, coyotes, rabbits, birds, and rodents.

F) Concurrent surface use – grazing and hunting.

G) Mineral Lessor - Bureau of Land Management
Price Field Office
125 South 600 West
Price, UT 84501 Phone: 435-636-3600

H) Proximity of water, occupied dwellings or other features: ±700' east of unnamed intermittent drainage.

I) Archaeological, cultural and historical information to be contained in a report sent under separate cover by SWCA Environmental Consultants.

J) Construction activity shall not be conducted using frozen or saturated solid material or during periods when significant watershed damage (e.g. rutting, extensive sheet soil erosion, formation of rills/gullies, etc.) is likely to occur.

K) The operator shall be responsible for the prevention and suppression of fires on public lands caused by its employees, contractors or sub-contractors. During conditions of extreme fire danger, surface use operations may be limited or suspended in specific areas.

L) Unless otherwise exempted, free and unrestricted public access shall be maintained on the lease and associated rights-of-way.

M) Facilities approved by the Application for Permit to Drill that are no longer included within the lease, due to a change in the lease or unit boundary, shall be authorized with a right-of-way.

N) Historic, Cultural, and Paleontological Resources

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five (5) working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in site preservation is not necessary); and,
- a timeframe for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the finds of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of the mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible fro mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed the operator will then be allowed to resume construction.

"The holder of this authorization shall immediately bring any paleontological resources or fossils discovered as a result of operations under this authorization to the attention of the authorized officer. The holder shall suspend all activities in the vicinity of such discovery until notified to proceed by the authorized officer. The authorized officer will evaluate, or will have evaluated, such discoveries not later than five (5) working days after being notified, and will determine what action shall be taken with respect to such discoveries. The decision as to the appropriate measures to mitigate adverse effects to significant paleontological resources will be made by the authorized officer after consulting with the holder. The holder may be responsible for the cost of any investigations necessary for the evaluation, and for any mitigative measures."

O) Kerr-McGee Oil & Gas Onshore LP maintains a file, per 29 CFR 1910.1200(g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be transported across these lands may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/stimulation activities such as flammable or combustible substances and acids/gels (corrosives). The opportunity for Superfund Amendments and Reauthorization Act (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous substances, EHS, and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

LESSEE'S OR OPERATOR'S REPRESENTATIVE(S):

Operator

Corporate Office:

Kerr-McGee Oil & Gas Onshore LP
1099 18th Street
Denver, CO 80202
(720) 929-6000

Jim Klechner, Vice President, Operations
Reed Scott, General Manager, Rockies
Ann Puchalski, Senior Geologist
Grant Schluender, Drilling Engineer II
Debby Black, Staff Regulatory Analyst **

Field Office:

60 South 700 East, Unit #1
Price, UT 84501
(435) 637-3044

Jim Hartley, Production Superintendent

** Contact with any questions regarding this application

CERTIFICATION:

I hereby certify that Kerr-McGee Oil & Gas Onshore LP and its contractors and sub-contractors are responsible for the operations conducted under this application subject to the terms and conditions of the mineral lease. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Kerr-McGee Oil & Gas Onshore LP under their nationwide bond, BLM Bond No. WYB000291.

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which 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 that 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.

Date: March 19, 2008

Debby J. Black
Debby J. Black
Staff Regulatory Analyst

Kerr-McGee Oil & Gas Onshore LP
WELLINGTON FEDERAL #31-18
SECTION 18, T14S, R11E, S.L.B.&M.

PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION FROM PRICE, UTAH APPROXIMATELY 2.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 2.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY, THEN NORTHERLY, THEN EASTERLY DIRECTION APPROXIMATELY 1.4 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #11-19 TO THE NORTH; FOLLOW ROAD FLAGS IN A NORTHERLY DIRECTION APPROXIMATELY 0.9 MILES TO AN EXISTING TWO-TRACK ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTELRY, THEN NORTHWESTERLY, THEN NORTHERLY DIRECTION APPROXIMATELY 2.0 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 300' TO THE PROPOSED LOCATION

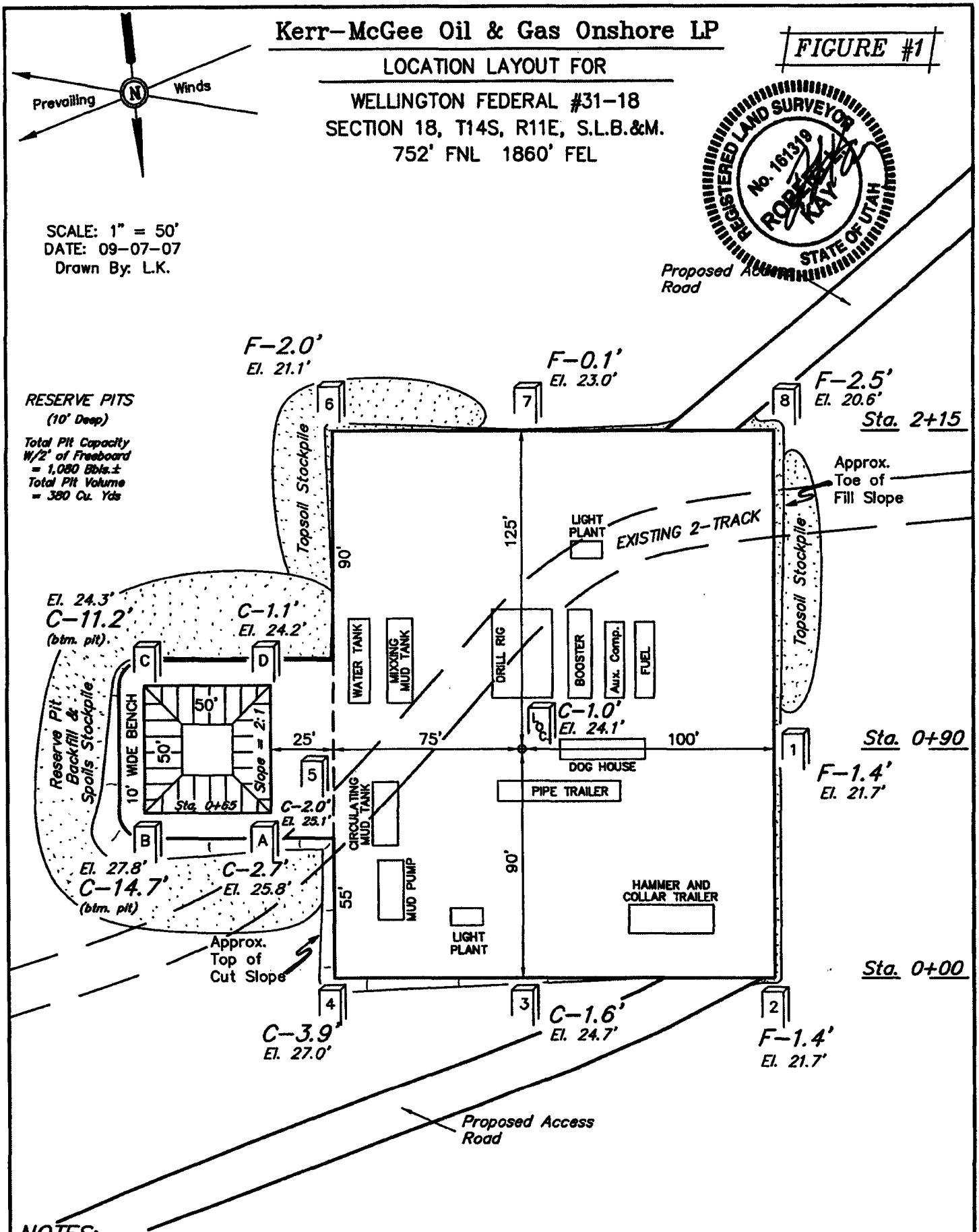
TOTAL DISTANCE FROM PRICE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 9.3 MILES.

Kerr-McGee Oil & Gas Onshore LP

LOCATION LAYOUT FOR

WELLINGTON FEDERAL #31-18
SECTION 18, T14S, R11E, S.L.B.&M.
752' FNL 1860' FEL

FIGURE #1



NOTES:

Elev. Ungraded Ground At Loc. Stake = 5924.1'
FINISHED GRADE ELEV. AT LOC. STAKE = 5923.1'

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

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FIGURE #2

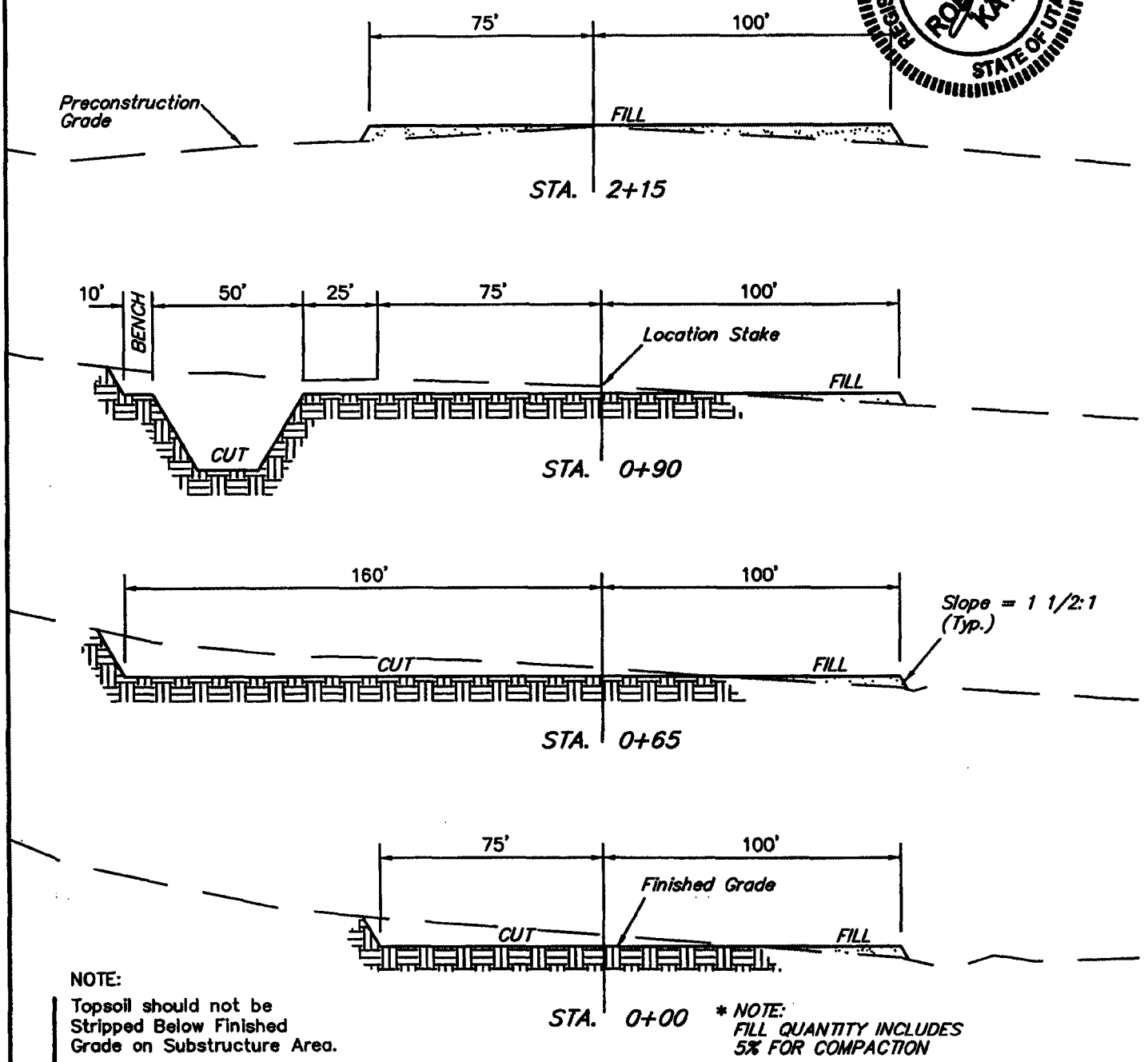
TYPICAL CROSS SECTIONS FOR

WELLINGTON FEDERAL #31-18
SECTION 18, T14S, R11E, S.L.B.&M.
752' FNL 1860' FEL

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

DATE: 09-07-07
Drawn By: L.K.

REGISTERED LAND SURVEYOR No. 161319 ROBERT KAY STATE OF UTAH



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

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT
(6") Topsoil Stripping = 880 Cu. Yds.
Remaining Location = 1,420 Cu. Yds.

TOTAL CUT = 2,300 CU.YDS.
FILL = 1,230 CU.YDS.

EXCESS MATERIAL = 1,070 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.) = 1,070 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation) = 0 Cu. Yds.

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WELLINGTON FEDERAL #31-18

LOCATED IN CARBON COUNTY, UTAH
SECTION 18, T14S, R11E, S.L.B.&M.

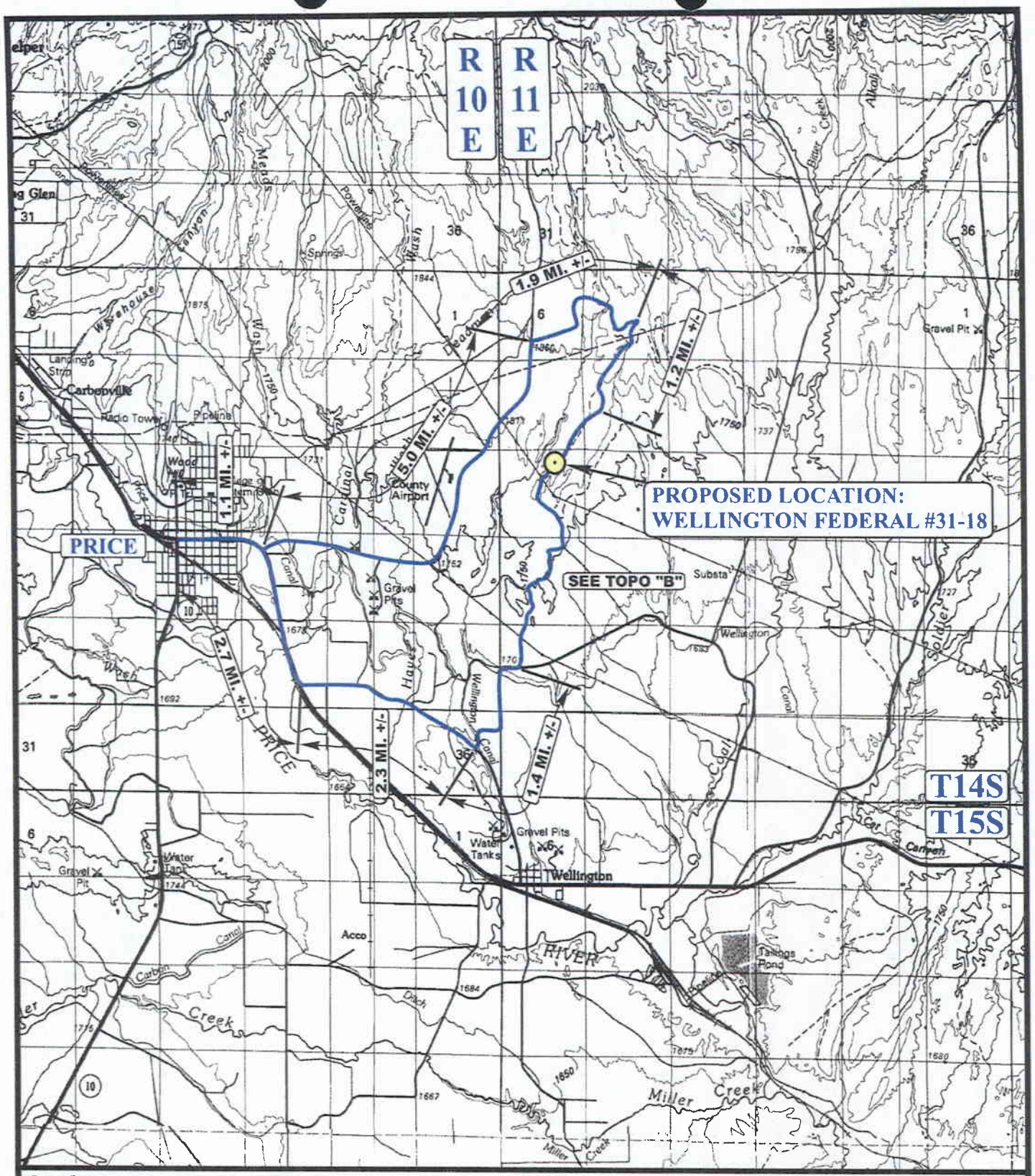
PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE **CAMERA ANGLE: WESTERLY**

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

- Since 1964 -

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS	09 MONTH	14 DAY	07 YEAR	PHOTO
TAKEN BY: B.B.	DRAWN BY: C.P.	REVISED: 00-00-00		



LEGEND:

PROPOSED LOCATION

N

Kerr-McGee Oil & Gas Onshore LP

WELLINGTON FEDERAL #31-18
SECTION 18, T14S, R11E, S.L.B.&M.
752' FNL 1860' FEL

UELS
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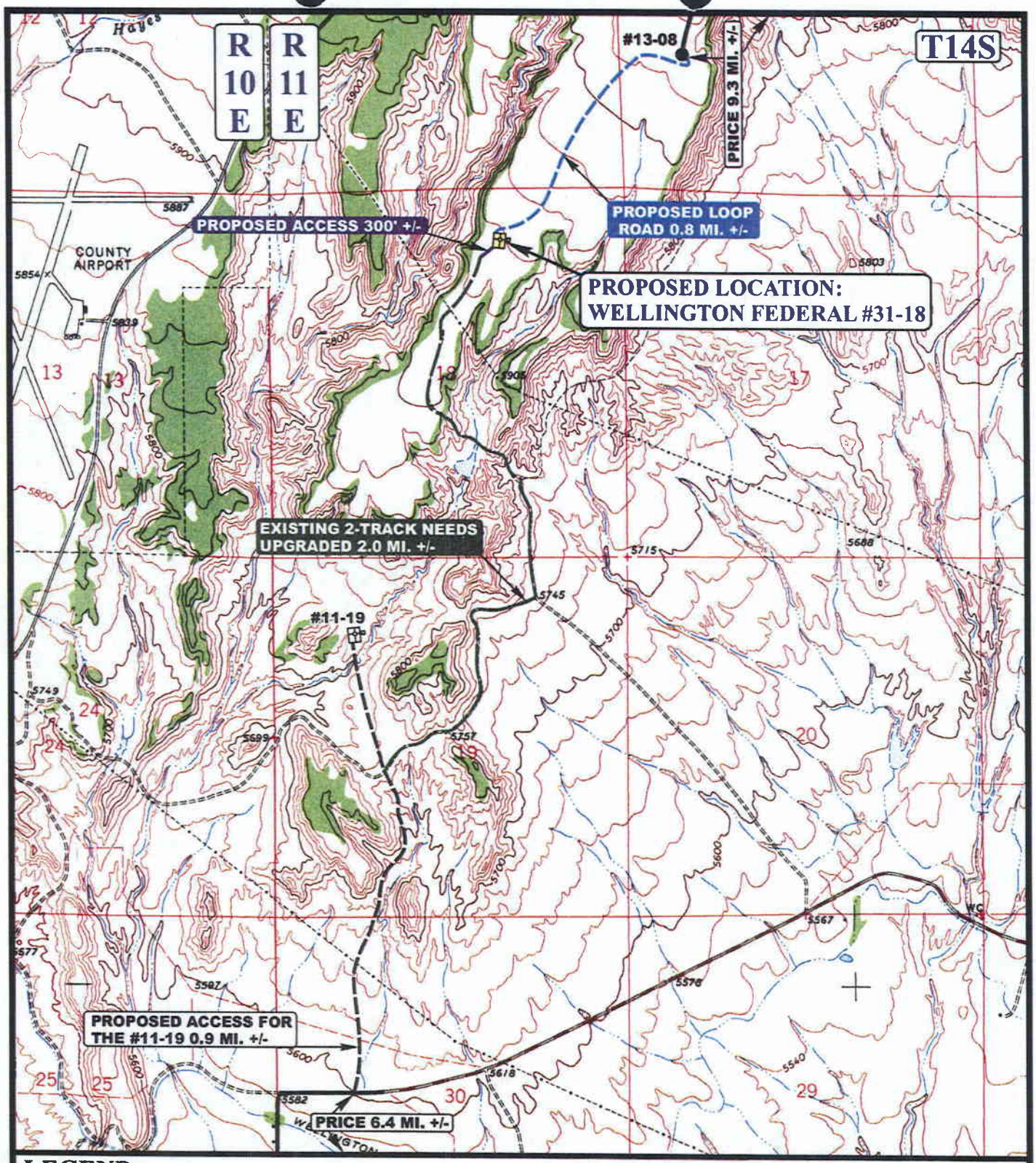
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	14 DAY	07 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: C.P.	REVISED: 00-00-00		



LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD
- EXISTING 2-TRACK NEEDS UPGRADED
- PROPOSED LOOP ROAD

N

Kerr-McGee Oil & Gas Onshore LP

WELLINGTON FEDERAL #31-18
SECTION 18, T14S, R11E, S.L.B.&M.
752' FNL 1860' FEL

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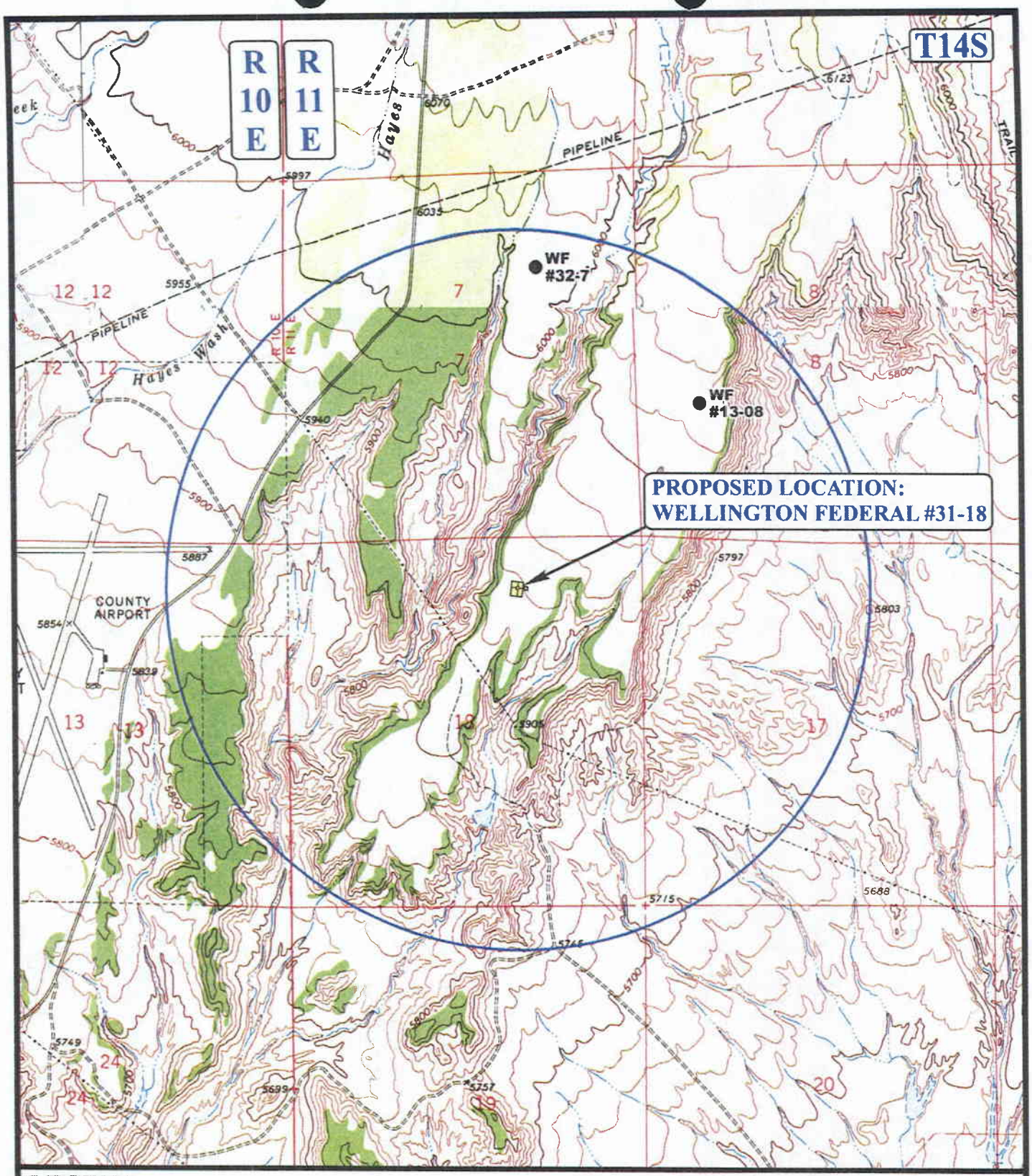
TOPOGRAPHIC MAP	09 MONTH	14 DAY	07 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 10-23-07		



LEGEND:

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

N

Kerr-McGee Oil & Gas Onshore LP

WELLINGTON FEDERAL #31-18
SECTION 18, T14S, R11E, S.L.B.&M.
752' FNL 1860' FEL

Uintah Engineering & Land Surveying
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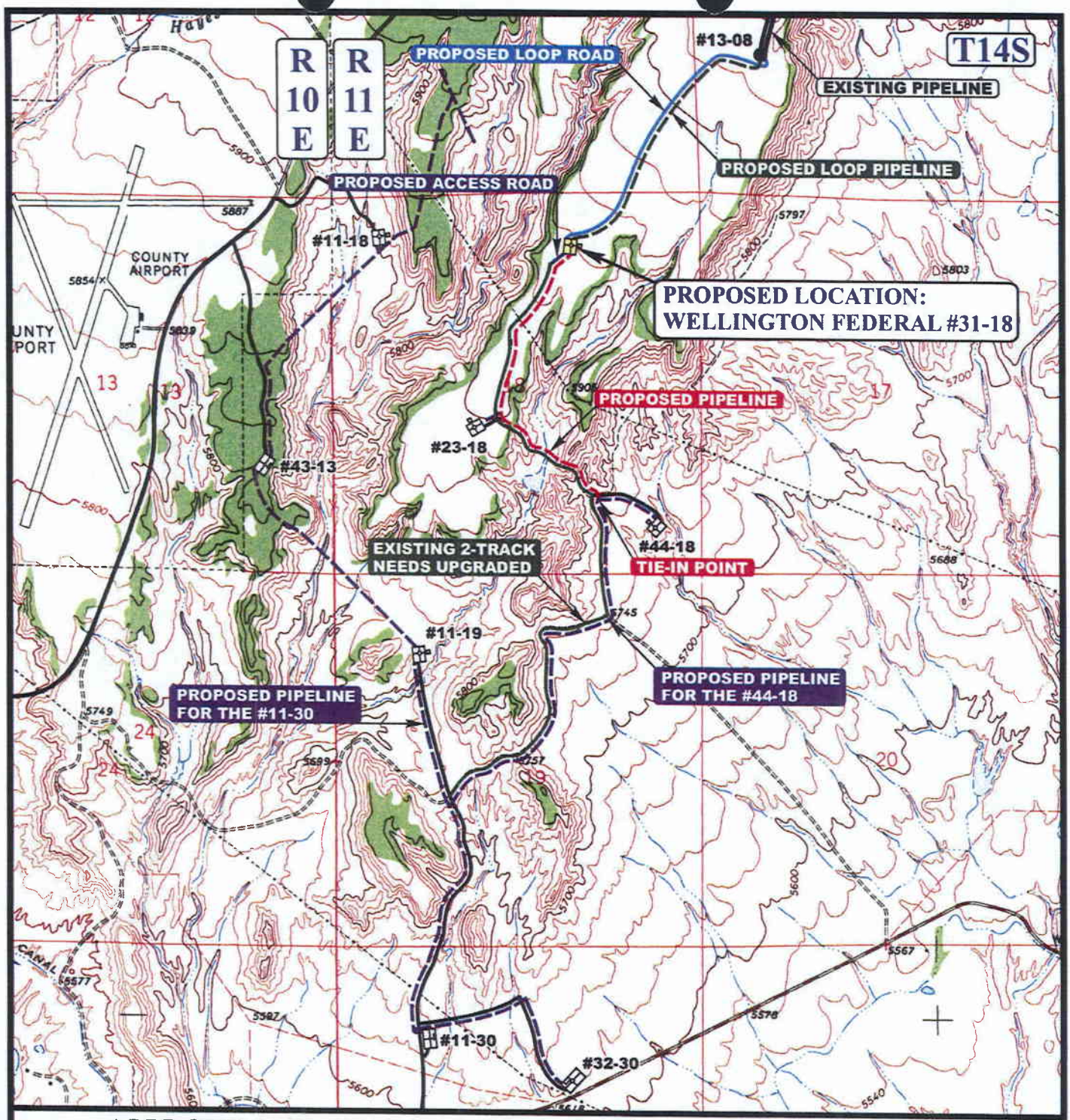
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	14 DAY	07 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 00-00-00		



APPROXIMATE TOTAL LOOP PIPELINE DISTANCE = 4,192' +/-

APPROXIMATE TOTAL PIPELINE DISTANCE = 4,625' +/-

LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING 2-TRACK NEEDS UPGRADED
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)

N

Kerr-McGee Oil & Gas Onshore LP

WELLINGTON FEDERAL #31-18
SECTION 18, T14S, R11E, S.L.B.&M.
752' FNL 1860' FEL

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

TOPOGRAPHIC MAP	09 MONTH	14 DAY	07 YEAR	D TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 10-23-07		

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 04/04/2008

API NO. ASSIGNED: 43-007-31389

WELL NAME: WELLINGTON FED 31-18

OPERATOR: KERR-MCGEE OIL & GAS (N2995)

PHONE NUMBER: 720-929-6000

CONTACT: DEBBY BLACK

PROPOSED LOCATION:

NWNE 18 140S 110E

SURFACE: 0752 FNL 1860 FEL

BOTTOM: 0752 FNL 1860 FEL

COUNTY: CARBON

LATITUDE: 39.61357 LONGITUDE: -110.7269

UTM SURF EASTINGS: 523448 NORTHINGS: 4384695

FIELD NAME: HELPER (18)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU080563

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: FRSD

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[1] Ind[] Sta[] Fee[]
(No. RLB005238)

N Potash (Y/N)

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

✓ Water Permit
(No. AIR DRILLE)

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

N/A Fee Surf Agreement (Y/N)

N/A Intent to Commingle (Y/N)

LOCATION AND SITING:

____ R649-2-3.

Unit:

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

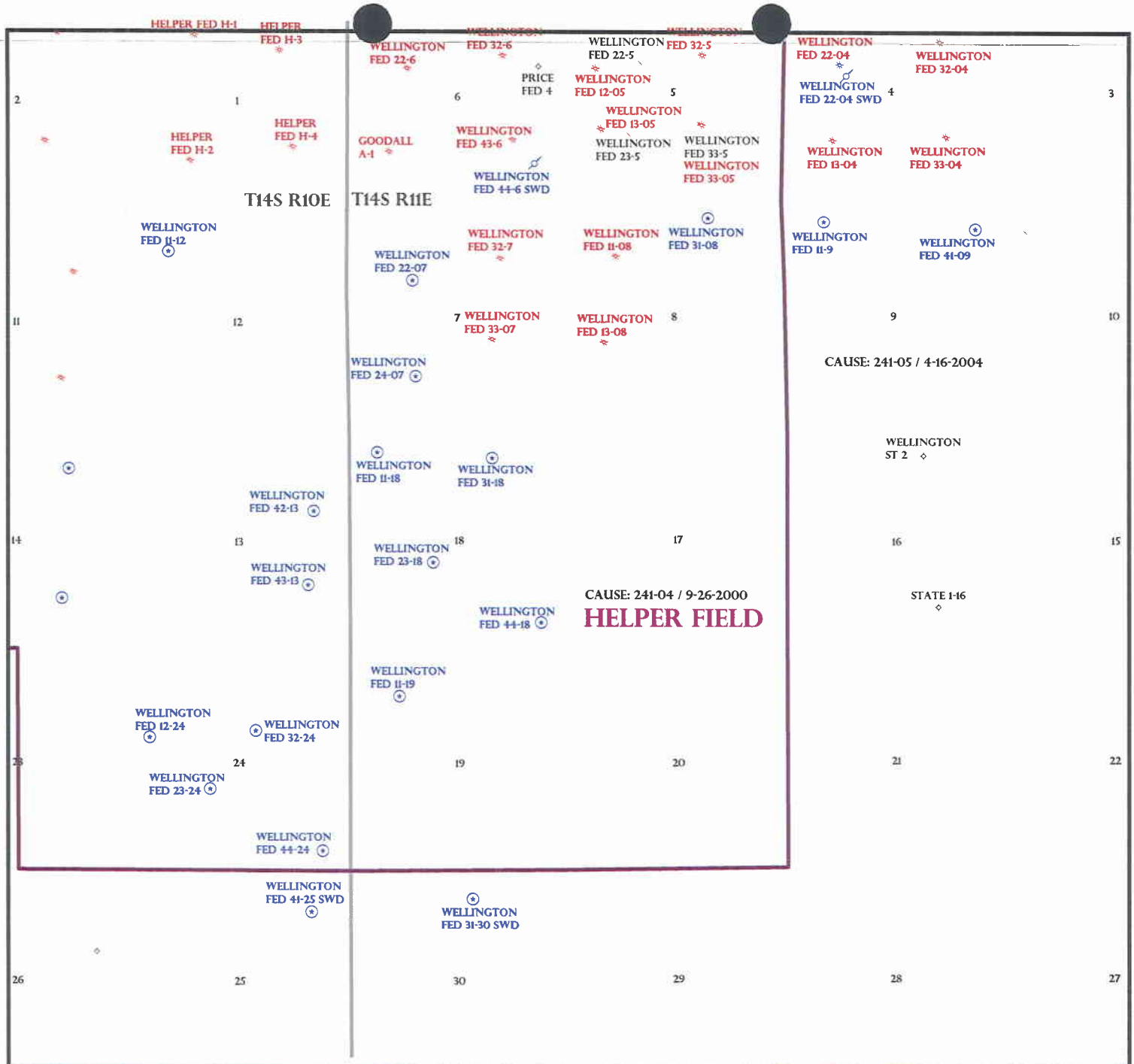
____ R649-3-3. Exception

✓ Drilling Unit
Board Cause No: 241-4
Eff Date: 9-26-2000
Siting: 460' fr Outer qtr/qtr bdry & 920' fr other wells.

____ R649-3-11. Directional Drill

COMMENTS:

STIPULATIONS: 1- Federal Approval



OPERATOR: XTO ENERGY INC (N2615)

SEC: 8,18 T.14S R. 11E

FIELD: HELPER (18)

COUNTY: CARBON

CAUSE: 241-04 / 9-26-2000

Field Status
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

Unit Status
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Wells Status
- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING

UTAH DNR OIL, GAS & MINING

N W E S

PREPARED BY: DIANA MASON
DATE: 9-APRIL-2008

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
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

April 9, 2008

Kerr-McGee Oil & Gas Onshore, LP
1099 18th St.
Denver, CO 80202

Re: Wellington Federal 31-18 Well, 752' FNL, 1860' FEL, NW NE, Sec. 18, T. 14 South, R. 11 East, Carbon County, Utah

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 43-007-31389.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Carbon County Assessor
Bureau of Land Management, Moab Office

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING

Operator: Kerr-McGee Oil & Gas Onshore, LP

Well Name & Number Wellington Federal 31-18

API Number: 43-007-31389

Lease: UTU-080563

Location: NW NE **Sec.** 18 **T.** 14 South **R.** 11 East

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

   Notify the Division with 24 hours of spudding the well.

   - Contact Carol Daniels at (801) 538-5284.

   Notify the Division prior to commencing operations to plug and abandon the well.

   - Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

3. Reporting Requirements

   All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

Form 3160-3 (August 2007)

RECEIVED
PRICE FIELD OFFICE
2008 APR -4 PM 1:22

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. Lease Serial No.: UTU080563

6. If Indian, Allottee or Tribe Name: N/A

7. If Unit or CA Agreement, Name and No.: N/A

1a. Type of Work: [X] DRILL [ ] REENTER

1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.: **Wellington Federal 31-18**

2. Name of Operator: **Kerr-McGee Oil & Gas Onshore LP**
Contact: Grant Schluender, Drilling Engineer
E-mail: Grant.Schluender@anadarko.com

9. API Well No.: 43-007-31389

3a. Address: **1099 18th Street**, Denver, CO 80202

3b. Phone No. (include area code): 720-929-6000

10. Field and Pool, or Exploratory: **undesignated / Ferron**

4. Location of Well (Report location clearly and in accordance with any State Requirements.*)
At surface: **752' FNL, 1860' FEL** **NW** /4 **NE** /4 Lot:
Lat: **39.613700** Long: **-110.727533**
At proposed production zone: Same as above

11. Sec., T., R., M., or Blk. and Survey or Area: **Sec. 18 T14S-R11E S.L.B.&M.**

14. Distance in miles and direction from nearest town or post office. *: **Approximately 5.6 miles from Price, Utah**

12. County or parish: **Carbon County**

13. State: **UT**

15. Distance from proposed location to nearest property or lease line, ft. (Also nearest Drig, unit line, if any): Unit= N/A; Lease= 752' FNL

16. No. of acres in lease: **1,946.06 ac.**

17. Spacing Unit dedicated to this well: **160 acre**

18. Distance from proposed location to nearest well, drilling, completed or applied for, on this lease, ft.: Wellington Fed 11-18 +\- 2700'

19. Proposed depth: **1800'** TVD

20. BLM/BIA Bond No. on file: BLM Bond: ~~B20060098~~ WYB000291

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 5924' Ungraded Ground Level

22. Approximate date work will start *: Upon APD Approval

23. Estimated duration: 5 days drilling, 9 days completion

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature: Debby J. Black
Name (Printed/Typed): Debby J. Black (Debby.Black@anadarko.com)
Date: March 19, 2008

Title: Staff Regulatory Analyst
720-929-6472 (Direct Line)
303-868-8485 (Cell)

Approved by (Signature): **/s/ Michael Stiewig**
Name (Printed/Typed): **Michael Stiewig**
Date: **SEP 05 2008**

Title: **ACTING FIELD MANAGER**
Office: **PRICE FIELD OFFICE**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

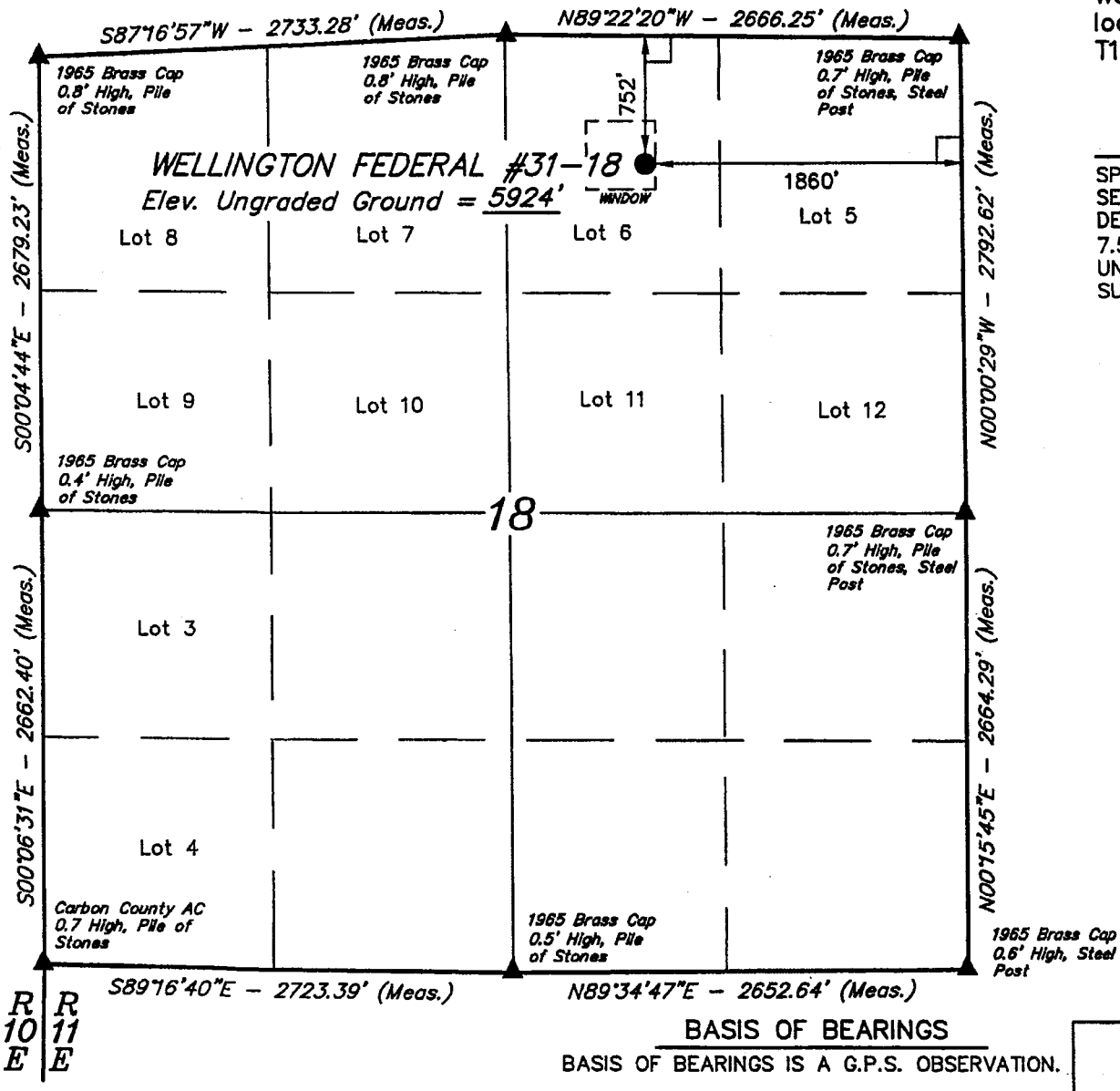
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

NOTICE OF APPROVAL

RECEIVED
SEP 10 2008
DIV. OF OIL, GAS & MINING

UDOGM

T14S, R11E, S.L.B.&M.

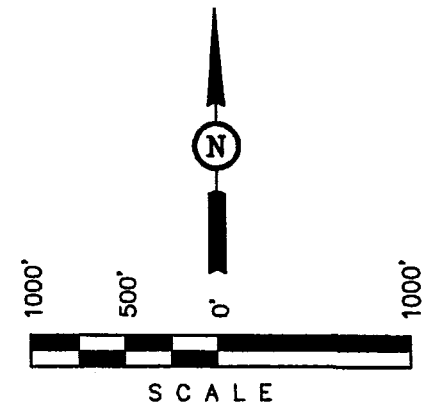


Kerr–McGee Oil & Gas Onshore LP

Well location, WELLINGTON FEDERAL #31–18, located as shown in LOT 6 of Section 18, T14S, R11E, S.L.B.&M., Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE NORTHWEST CORNER OF SECTION 7, T14S, R11E, S.L.B.&M. TAKEN FROM THE DEADMAN CANYON, QUADRANGLE, UTAH, CARBON COUNTY 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5997 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

BASIS OF BEARINGS

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

(NAD 83)
LATITUDE = 39°36'49.32" (39.613700)
LONGITUDE = 110°43'39.12" (110.727533)
(NAD 27)
LATITUDE = 39°36'49.45" (39.613736)
LONGITUDE = 110°43'36.55" (110.726819)

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: 09–04–07	DATE DRAWN: 09–07–07
PARTY B.B. K.D. L.K.	REFERENCES G.L.O. PLAT	
WEATHER HOT	FILE Kerr–McGee Oil & Gas Onshore LP"	

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PRICE FIELD OFFICE
125 SOUTH 600 WEST PRICE, UT 84501 (435) 636-3600

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Kerr-McGee Oil & Gas Onshore LP**	**Location:**	**NWNE-Sec. 18-T14S-R11E**
Well No:	**Wellington Federal 31-18**	**Lease No:**	**UTU-80563**
API No:	**43-007-31389**	**Agreement:**	**Undesignated/Ferron**

Title	**Name**	**Office Phone Number**	**Cell Phone Number**
Acting Field Manager & Authorized Officer:	Michael Stiewig	(435) 636-3633	(435) 650-9135
Senior Petroleum Engineer:	Matthew Baker (Primary)	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	James Ashley (Alt.)	(435) 781-4470	(435) 828-7874
Petroleum Engineering Technician	Randy Knight (Primary)	(435) 636-3615	(435) 650-9143
Petroleum Engineering Technician	Walton Willis (Alt.)	(435) 636-3662	(435) 650-9140
NRS/Enviro Scientist:	Don Stephens	(435) 636-3608	

Fax: (435) 636-3657

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Location Construction (Notify NRS)	- Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify NRS)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC COAs:

- A pre-construction field meeting may be conducted prior to beginning any dirt work approved under this APD. The operator shall contact the BLM Authorized Officer Don Stephens @ 435-636-3608 at least 48-hours prior to beginning operations so that the meeting can be scheduled. The operator is responsible for having all contractors present (dirt contractors, drilling contractor, pipeline contractor, project oversight personnel, etc.) including the overall field operations superintendent, and for providing all contractors copies of the approved APD(s), project map and BLM Conditions of Approval pertinent to the work that each will be doing.

- The following appendices are attached for your reference. They are to be followed as conditions of approval:
    - Applicant-commented environmental protection measures 2.3
    - Appendix B Revegetation Plan

- KMG will measure gas production on the well pad unless permission is granted for measurement at another place.

- As required by the Price River MFP, if cultural resources are uncovered during surface-disturbing activities, KMG will suspend operations at the site and immediately contact the AO, who will arrange for a determination of eligibility in consultation with the SHPO, and, if necessary, recommend a recovery or avoidance plan.

- The Wellington Federal #11-12 well location contains two cultural sites the 42CB002313 and 42CB002314. Both sites shall be avoided by a minimum of 150 feet which may involve shifting the existing well center stake. Protective fencing shall be placed around portions of the site boundaries that face the proposed development in order to assist site avoidance during construction activities. The placing of the protective fencing shall be done under the supervision of a qualified archeologist.

- As required under 40 CFR 112.3(e), KMG will maintain a copy of the SPCC plan at each facility, if the facility is normally attended at least eight hours per day, or at the nearest field office if the facility is not so attended. KMG will also implement and adhere to SPCC plans in a manner such that any spill or accidental discharge of oil will be reported and remediated.

- All equipment and personnel used during drilling and construction activities will be restricted to only approve access roads.

- All permanent above-ground structures (e.g., production equipment, tanks, etc.) not subject to safety requirements will be painted to blend with the natural color of the landscape. The paint used will be a color which simulates "Standard Environmental Colors." All facilities will be painted the designated color at the time of installation.

- No oil, lubricants, or toxic substances may be drained onto the ground surface.

- KMG will not allow any open burning of garbage or refuse at well sites or other facilities.

- KMG will repair or replace to current BLM standards any fences, cattleguards, gates, drift fences, and natural barriers that are damaged as a result of the Proposed Action. Cattleguards will be used instead of gates for livestock control on most road ROWs.

- To minimize wildlife mortality due to vehicle collisions, KMG will advise project personnel regarding appropriate speed limits in the Project Area. Employees and contractors will be educated about anti-poaching laws.

- Please contact Don Stephens, Natural Resource Specialist, (435) 636-3608, Bureau of Land Management, Price Field Office, if there are any questions concerning these surface use COAs.

Standard Conditions of Approval

General

- KMG will provide georeferenced spatial data depicting as-built locations of all facilities, wells, roads, pipelines, power lines, and other related facilities to the BLM by November 1 of each year until completion of project construction activities has occurred

- KMG will inform their employees, contractors, and subcontractors about relevant Federal regulations intended to protect archaeological and cultural resources. All personnel will be informed that collecting artifacts, including arrowheads, is a violation of Federal law and that employees engaged in this activity will be subject to disciplinary action.

Construction

- Topsoil will be removed from constructed well locations including areas of cut and fill, and stockpile at the site. Topsoil will also be salvaged for use in reclamation on all other areas of surface disturbance (roads, pipelines, etc.). Clearly segregate topsoil from excess spoil material. Any topsoil stockpiled for one year or longer will be signed and stabilized with annual ryegrass or other suitable cover crop.

- The operator will not push soil material and overburden over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved without creating additional undue surface disturbance and where it does not impede watershed and drainage flows.

- Construct the backslope no steeper than 1½:1, and construct the foreslope no steeper than 2:1, unless otherwise directed by the BLM Authorized Officer.

- Maintain a minimum 20-foot undisturbed vegetative border between toe-of-fill of pad and/or pit areas and the edge of adjacent drainages, unless otherwise directed by the BLM Authorized Officer.

- Reserve pits will be adequately fenced during and after drilling operations until the pit is reclaimed so as to effectively keep out wildlife and livestock. Adequate fencing, in lieu of more stringent requirements by the surface owner, is defined as follows: 1) Construction materials will consist of steel or wood posts. Three or four strand wire (smooth or barbed) fence or hog panel (16-foot length by 50-inch height) or plastic snow fence must be used with connectors such as fence staples, quick-connect clips, hog rings, hose clamps, twisted wire, etc. Electric fences will not be allowed; 2) Construction standards: Posts shall be firmly set in ground. If wire is used, it must be taut and evenly spaced, from ground level to top wire, to effectively keep out animals. Hog panels must be tied securely into posts and one another using fence staples, clamps, etc. Plastic snow fencing must be taut and sturdy. Fence must be at least 2-feet from edge of pit. 3 sides fenced before beginning drilling, the fourth side fenced immediately upon completion of drilling and prior to rig release. Fence must be left up and maintained in adequate condition until pit is closed.

- The reserve pit will be oriented to prevent collection of surface runoff. After the drilling rig is removed, the operator may need to construct a trench on the uphill side of the reserve pit to divert surface drainage around it. If constructed, the trench will be left intact until the pit is closed.

- The reserve pit will be lined with an impermeable liner if permeable subsurface material is encountered. An impermeable liner is any liner having a permeability less than 10^{-7} cm/sec. The liner will be installed so that it will not leak and will be chemically compatible with all substances that may be put in the pit. Liners made of any man-made synthetic material will be of sufficient strength and thickness to withstand normal installation and pit use. In gravelly or rocky soils, a suitable bedding material such as sand will be used prior to installing the liner.

- Culverts will be placed on channel bottoms on firm, uniform beds, which have been shaped to accept them, and aligned parallel to the channel to minimize erosion. Backfill will be thoroughly compacted.

- The minimum diameter for culverts will be 18 inches. However, all culverts will be appropriately sized in accordance with standards in BLM Manual 9113.

- Pipeline construction shall not block nor change the natural course of any drainage. Pipelines shall cross perpendicular to drainages. Pipelines shall not be run parallel in drainage bottoms. Suspended pipelines shall provide adequate clearance for maximum runoff.

- Pipeline trenches shall be compacted during backfilling. Pipeline trenches shall be routinely inspected and maintained to ensure proper settling, stabilization and reclamation.

- The operator shall submit a Sundry Notice (Form 3160-5) to BLM for approval prior to construction of any new surface disturbing activities that are not specifically addressed in the approved APD.

- Surface disturbance will be limited to the approved location and access routes.

- No surface-disturbing activities will occur during muddy and wet periods (e.g., when soils are saturated and excessive rutting of more than four inches with multiple passes could occur).

- The edges of well pads will be feathered to blend with the surrounding landscape.

- Removal and disturbance of vegetation will be kept to a minimum through construction site management (e.g., using previously disturbed areas and existing easements where feasible, placing pipelines adjacent to roads, limiting well pad size, etc.).

- During the construction phase of the project, KMG will implement an intensive reclamation and weed control program after each segment of project completion. KMG will reseed all portions of wells pads and the ROW not utilized for the operational phase of the project. Post-construction seeding application will continue until determined successful by the BLM. Weed control will be conducted through an Approved Pesticide Use and Weed Control Plan from the AO.

- To reduce the spread or introduction of noxious and invasive weed species into the Project Area via project-related vehicles and equipment, KMG and its contractors will power-wash all construction equipment prior to the entering the Project Area.

- Areas used for spoil storage will be stripped of topsoil before spoil placement.

- Appropriate erosion control and revegetation measures will be employed. In areas with unstable soils where seeding alone may not adequately control erosion, grading will be used to minimize slopes and water bars will be installed on disturbed slopes. Erosion control efforts will be monitored by KMG and necessary modifications would be made to control erosion.

- Sufficient topsoil or other suitable materials to facilitate revegetation will be segregated from subsoils during all construction operations requiring excavation and will be returned to the surface upon completion of operations. Soils compacted during construction will be ripped and tilled as necessary prior to reseeding. Cut and fill sections on all roads and along pipelines will be revegetated with native species.

- During the activities of road maintenance, new road construction or the construction of well pads, if any standing live or dead trees are damaged, cut down or knocked over by grading or construction equipment, actions would be taken to remove the vegetation from the road or pad edge. These materials would distributed over the reclaimed areas as directed by BLM.

Operations/Maintenance

- Rat and mouse holes shall be filled and compacted from the bottom to the top immediately upon release of the drilling rig from the location.

- Hydrocarbons shall be put in test tanks on location during completion work. Produced water will be put in the reserve pit during completion work per Onshore Order #7.

- The only fluids/waste materials which are authorized to go into the reserve pit are RCRA exempt exploration and production wastes. These include drilling muds and cuttings, rigwash, and excess cement and certain completion & stimulation fluids defined by EPA as exempt. It does not include drilling rig waste, such as spent hydraulic fluids, used engine oil, used oil filter, empty cement, drilling mud, or other product sacks, empty paint, pipe dope, chemical or other product containers, and excess chemicals or chemical rinsate. Any evidence of non-exempt wastes being put into the reserve pit may result in the BLM Authorized Officer requiring specific testing and closure requirements.

- If this well is drilled during the fire season (June-October), the operator shall institute all necessary precautions to ensure that fire hazard is minimized, including but not limited to mowing vegetation on the access route(s) and well location(s), keeping fire fighting equipment readily available when drilling, etc.

Dry Hole/Reclamation

- All disturbed lands associated with this project, including the pipelines, access roads, etc. will be expediently reclaimed and reseeded in accordance with the surface use plan and any pertinent site-specific COAs.

- The Seed Mixtures and procedures outline in Appendix B Revegetation Plan of the Cardinal Draw II Coal Bed Methane Project EA (attached) shall be used for reclamation.

- Disturbed lands will be re-contoured back to conform with existing undisturbed topography. No depressions will be left that trap water or form ponds.

- Reserve pits will be closed as soon as possible, unless the BLM Authorized Officer gives an extension. Squeezing of pit fluids and cuttings is prohibited. Pits must be dry of fluids or they must be removed via vac-truck or other environmentally acceptable method prior to backfilling, re-contouring and replacement of topsoil. Mud and cuttings left in pit must be buried at least 3-feet below re-contoured grade. The operator will be responsible for re-contouring any subsidence areas that develop from closing a pit before it is sufficiently dry.

- Before the location has been reshaped and prior to redistributing the topsoil, the operator will rip or scarify the drilling platform and access road on the contour, to a depth of at least 12 inches. The rippers are to be no farther than 24 inches apart.

- Distribute the topsoil evenly over the entire location and other disturbed areas. Prepare the seedbed by disking to a depth of 4-to-6 inches following the contour.

- Phased reclamation plans will be submitted to BLM for approval prior to individual POD facility abandonment via a Notice of Intent (NOI) Sundry Notice. Individual facilities, such as well locations, pipelines, discharge points, impoundments, etc. need to be addressed in these plans as they are no longer needed. Individual items that will need to be addressed in reclamation plans include:

    1. Pit closure

2. Configuration of reshaped topography, drainage systems, and other surface manipulations
3. Waste disposal
4. Revegetation methods, including specific seed mix (pounds pure live seed/acre) and soil treatments (seedbed preparation, fertilization, mulching, etc.). On private surface, the landowner should be consulted for the specific seed mix.
5. Other practices that will be used to reclaim and stabilize all disturbed areas, such as water bars, erosion fabric, hydro-mulching, etc.
6. An estimate of the timetables for beginning and completing various reclamation operations relative to weather and local land uses.
7. Methods and measures that will be used to control noxious weeds, addressing both ingress and egress to the individual well or POD.
8. Decommissioning/removal of all surface facilities.

- A Notice of Intent to Abandon and a Subsequent Report of Abandonment must be submitted for abandonment approval.

- For performance bond release approval, a Final Abandonment Notice (with a surface owner release letter on split-estate) must be submitted prior to a final abandonment evaluation by BLM.

- Soil fertility testing and the addition of soil amendments may be required to stabilize some disturbed lands.

- Any mulch utilized for reclamation needs to be certified weed free.

- Waterbars are to be constructed at least one (1) foot deep, on the contour with approximately two (2) feet of drop per 100 feet of waterbar to ensure drainage, and extended into established vegetation. All waterbars are to be constructed with the berm on the downhill side to prevent the soft material from silting in the trench. The initial waterbar should be constructed at the top of the backslope. Subsequent waterbars should follow the following general spacing guidelines:

Slope (percent)	Spacing Interval (feet)
≤ 2	200
2 – 4	100
4 – 5	75
≥ 5	50

Producing Well

All internal combustion equipment will be kept in good working order.

- Landscape those areas not required for production to the surrounding topography as soon as possible.

- Reduce the backslope to 2:1 and the foreslope to 3:1, unless otherwise directed by the BLM Authorized Officer. Reduce slopes by pulling fill material up from foreslope into the toe of cut slopes.
- Production facilities (including dikes) must be placed on the cut portion of the location and a minimum of 15 feet from the toe of the back cut unless otherwise approved by the BLM Authorized Officer.
- Any spilled or leaked oil, produced water or treatment chemicals must be reported in accordance with NTL-3A and immediately cleaned up in accordance with BLM requirements. This includes clean-up and proper disposition of soils contaminated as a result of such spills/leaks.
- Distribute stockpiled topsoil evenly over those areas not required for production and reseed as recommended.
- Upgrade and maintain access roads and drainage control (e.g., culverts, drainage dips, ditching, crowning, surfacing, etc.) as necessary and as directed by the BLM Authorized Officer to prevent soil erosion and accommodate safe, environmentally-sound access.
- Prior to construction of production facilities not specifically addressed in the APD, the operator shall submit a Sundry Notice to the BLM Authorized Officer for approval.
- If not already required prior to constructing and drilling the well location, the operator shall immediately upgrade the entire access road to BLM standards (including topsoiling, crowning, ditching, drainage culverts, surfacing, etc.) to ensure safe, environmentally-sound, year-round access. This requirement does not supercede or apply where specific road requirements are addressed in the APD/POD surface use plan (e.g., two track road, spot upgrade, etc.)
- Waterbars shall be installed on all reclaimed pipeline corridors per the guidelines.

Roads and Pipelines

- No road grades in excess of 15 percent will occur without written permission of the AO.
- Roads constructed on BLM lands shall be constructed to allow for drainage and erosion control. The operator is responsible for maintenance of all roads authorized through the lease or right-of-way. Construction and maintenance shall comply with BLM System Road Standards as described in BLM Manual Section 9113 and the BLM Gold Book standards, except as modified by BLM. Maintenance may include but is not limited to grading, applying gravel, snow removal, ditch cleaning, and headcut restoration/prevention.
- Topsoil from access roads and pipelines are to be wind rowed along the uphill side of the road or stored in an approved manner. When the road and pipeline is rehabilitated, this soil will then be used as a top coating for the seed bed.
- The operator shall provide an inspector under the direction of a registered professional engineer (PE) at all times during road construction. A PE shall certify (statement with PE stamp) that the road was constructed to the required Bureau of Land Management (BLM) road standards.

- Erosion-control structures such as water bars, diversion channels, and terraces will be constructed to divert water and reduce soil erosion on the disturbed area. Road ditch turnouts shall be equipped with energy dissipaters as needed to avoid erosion. Where roads interrupt overland sheet-flow and convert this runoff to channel flow, ditch turnouts shall be designed to reconvert channel flow to sheet flow. Rock energy dissipaters and gravel dispersion fans may be used, or any other design which would accomplish the desired reconversion of flow regime. As necessary cut banks, road drainages, and road crossings shall be armored or otherwise engineered to prevent headcutting

Health and Safety

- In accordance with 29 CFR 1910.1200, a Material Safety Data Sheet (MSDS) for every chemical or hazardous material brought on-site will be kept on file in KMG's field office.

- KMG will transport and/or dispose of any hazardous wastes, as defined by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, in accordance with all applicable Federal, State, and local regulations.

- All storage tanks that contain produced water, or other fluids which may constitute a hazard to public health or safety, will be surrounded by a secondary means of containment for the entire contents of the tank, plus freeboard for precipitation, or to contain 110 percent of the capacity of the tank. The appropriate containment and/or diversionary structures or equipment, including walls and floor, will be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not drain, infiltrate, or otherwise escape to groundwater or surface waters before cleanup is completed. A liner shall be used when the ground is permeable and would allow filtration of fluid to the subsurface strata.

- Notice of any spill or leakage, as defined in BLM NTL 3A, will be immediately reported by KMG to the AO and to other Federal and State officials as required by law. Oral notice will be given as soon as possible, but within no more than 24 hours, and those oral notices will be confirmed in writing within 72 hours of any such occurrence.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- The proposed 2M BOPE is adequate for anticipated conditions. Any equipment rated higher than 2M need only be tested to 2M standards. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas order No. 2.

- Concurrent approval from the State of Utah Division of Oil, Gas and Mining (DOGM) is required before conducting any surface disturbing activities.

- When drilling with air, the requirements of Onshore Oil & Gas Order No. 2, Part III.E *Special Drilling Operations*, shall apply. The blooie line discharge point is to be a minimum of 80 feet from the wellhead.

- Any water zones encountered below the surface casing shoe shall be reported to BLM and shall be isolated with cement.

- If cement does not circulate to surface on the production casing, a cement bond log (CBL) or other appropriate tool for determining top-of-cement, shall be run and shall be submitted to BLM.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Price Field Office within 24 hours of spudding.

- Notify Price Field Office Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.

- If air drilling operations are utilized, the requirements of Onshore Oil & Gas Order No. 2, Part III.E *Special Drilling Operations*, shall be implemented.

- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.

- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.

- No aggressive/fresh hard-banded drill pipe shall be used within casing.

- **Cement baskets shall not be run on surface casing.**

- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Price Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Price Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Price BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Price Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- The use of a flow conditioner in lieu of straightening vanes in the gas meter run cannot be approved with the information provided. This proposal is not consistent with the provisions of Onshore Oil & Gas Order No. 5, and as such, can only be considered for approval as a "variance" from Order No. 5. A written request for variance would identify the Order No. 5 requirement(s) from which the variance is being requested, and it would included supporting justification as to how the alternate method of measurement would meet or exceed the minimum standards established in Order No. 5. A variance request for the use of a flow conditioner would also include the make, model, dimensions, and description of use for the specific flow conditioner being proposed.

- **Please submit a copy of all other logs run on this well to the BLM Price Field Office.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Price Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.

- Should the well be successfully completed for production, the BLM Price Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.

    - Well name and number.

    - Well location (¼¼, Sec., Twn, Rng, and P.M.).

    - Date well was placed in a producing status (date of first production for which royalty will be paid).

    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).

    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.

    - Unit agreement and/or participating area name and number, if applicable.

    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Price Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Price Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in

accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Price Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Price Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Price Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Price Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Price Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Price Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Price Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Price Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

2.3 BLM Requirements and Applicant-committed Protection Measures

For this project KMG has voluntarily agreed to use and comply with the following protective measures and procedures to avoid or lessen impacts to resources or other land uses, after consultation with BLM regarding agency requirements. These measures and procedures would be applied on privately owned surface unless the private surface owners involved specifically require alternate actions while still in compliance with applicable laws and regulations. An exception to a protective measure or design feature may be approved, by the authorized officer on a case-by-case basis when deemed appropriate by the BLM. Exceptions could be approved in the event a site-specific analysis concludes that the resource or land use that the measure was intended to mitigate is not present or would not be extensively affected in the absence of the mitigation measure or design feature, should the authorized officer deem that the exception is appropriate. In order to reduce potential impacts to specific resources, KMG has committed to the following environmental protection measures as part of the Proposed Action:

Pre-construction Planning, Design, and Compliance Measures

1. KMG would designate a qualified representative to serve as Compliance Coordinator. This person will be responsible for ensuring that all requirements of the APDs (including Conditions of Approval) and POD are followed.
2. KMG and the BLM would attend on-site inspections of each proposed and staked facility site (such as drill locations and other facilities), new access road, access road upgrades (two-track roads), and pipeline alignment projects to develop site-specific recommendations and mitigation measures.
3. New roads would be constructed and existing roads maintained in the project area in accordance with standards in the BLM Manual 9113 and applicable regulations for resource roads and construction details outlined in the Proposed Action and Conditions of Approval. These standards would be followed on BLM surface ownership lands.
4. Prior to construction, KMG would submit an APD package in accordance with Onshore Order #1 to the BLM. This package would contain individual APDs for each drill site, as well as schematics of facilities, and ROW applications for pipelines, utilities, and access roads. APDs submitted by KMG would show the layout of the drill pad over the existing topography, the dimensions of the pad, cross sections of the cuts and fills (when required), the location and dimensions of reserve pits, locations of access roads, and plans for interim and final reclamation.
5. KMG would slope-stake construction when required by the BLM (for example, in steep or unstable slopes) and receive approval from the BLM before construction begins.
6. BLM would require roads to be constructed with a 0.3- to 0.5-foot crown, and ditched. The topsoil would be graded over the cut slope so no berm is left at the top of the cut slope.
7. BLM would require that culverts in roads be covered with a minimum of 12 inches of fill or one-half the diameter of the pipe, whichever is greater. The inlet and outlet will be set flush with existing ground and lined up in the center of the draw. Before the area is backfilled, the bottom of the pipe will be bedded on stable ground that does not contain expansive or clay soils, protruding rocks that would damage the pipe, or unevenly sized material that would not form a good seat for the pipe. The site would be backfilled with unfrozen material and rocks no larger than 2 inches in diameter. Care would be exercised to thoroughly compact the backfill under the haunches of the conduit. The backfill would be brought up evenly in 6-inch layers on both sides of the conduit.
8. Additional culverts would be installed in the existing access road as needed or as directed by BLM.

9. The access roads would be surfaced with an appropriate grade of aggregate or gravel to a depth of 2 to 4 inches before the drilling equipment or rig is moved onto the pad.
10. BLM would require that access roads be maintained in a safe and usable condition. A regular maintenance program would include, but is not limited to, blading, ditching, installing or cleaning culverts, and surfacing.
11. The written approval of the authorized officer would be obtained before snow removal outside the new and existing roadways is undertaken. If approval is given, equipment used for snow removal operations outside the road ditches would be equipped with shoes to keep the blade off the ground surface. Special precautions would be taken where the surface of the ground is uneven to ensure that equipment blades do not destroy the vegetation.
12. BLM would require that wing ditches be constructed, as necessary, to divert water from road ditches.
13. Trenches that are open for the installation of pipelines would have plugs placed no more than 1,000 feet apart to allow livestock and wildlife to cross the trench or walk out of it, if needed. Placement of plugs would be determined in consultation with BLM and any affected landowner.
14. Procedures would be implemented to prevent livestock or wildlife from falling into open excavations. Procedures could include temporary covers, fencing, or other means acceptable to BLM and any affected landowner.
15. On the well pad locations, BMPs to minimize erosion would include the use of ditches, water bars and detention basins. These actions would be implemented in accordance with the Utah Pollutant Discharge Elimination System (UPDES) storm water permit program and the Utah Non-point Source Management Plan. Disturbed areas resulting from all construction would be revegetated as described in **Appendix B**.
16. KMG would provide as-built maps of surface disturbing activities following completion of construction activities, or annually as needed.

Resource-specific Requirements

KMG propose to implement resource-specific protection measures, procedures, and BLM management requirements on public lands. These measures are outlined below and in the various resource sections.

Geology and Minerals

Protection measures presented in Section 2.3.2.3, Water Resources, would avoid or minimize many of the potential impacts to surface mineral resources. BLM and UDOGM policies on casing and cementing would protect subsurface mineral resources from adverse impacts.

Soils

1. KMG would reduce the area of disturbance to the absolute minimum necessary for construction and production operations while providing for the safety of the operation.
2. Where feasible, KMG would locate pipelines immediately adjacent to roads to avoid creating separate areas of disturbance and to reduce the total area of disturbance.
3. KMG would avoid using frozen or saturated soils as construction material.
4. KMG would minimize construction in areas of steep slopes.
5. Cut slopes would be designed in a manner that would retain topsoil, and facilitate use of surface treatment such as mulch and subsequent revegetation.
6. KMG would selectively strip and salvage topsoil or the best suitable medium for plant growth from all disturbed areas. Topsoil would be removed and conserved to

a minimum depth of 6 inches and a maximum of 12 inches from all drill locations, unless otherwise agreed by the BLM and the operator.

7. Topsoil stockpiles would be respread upon completion of construction activities or when such areas are no longer needed for production efforts.
8. Where possible, disturbance to vegetated cuts and fills would be minimized on existing improved roads.
9. KMG would install runoff and erosion control measures such as water bars, berms, and interceptor ditches if needed.
10. KMG would install culverts for ephemeral and intermittent drainage crossings. In addition, drainage crossing structures would be designed to carry the 25-year discharge event, or as otherwise directed by the BLM.
11. Layout of the access roads may require minor variations in routing to avoid steep slopes adjacent to ephemeral or intermittent drainage channels. Where possible, KMG would preserve a 100-foot-wide buffer of natural vegetation (not including wetland vegetation) between construction and ephemeral and intermittent channels.
12. KMG would include adequate drainage control devices and measures in the design of roads (for example, berms and drainage ditches, diversion ditches, cross drains, culverts, out-sloping, and energy dissipaters). These devices and measures would be located at sufficient intervals and intensities to adequately control and direct surface runoff above, below, and within the road to avoid erosive, concentrated flows. In conjunction with surface runoff or drainage control measures, KMG would use erosion control devices and measures such as temporary barriers, ditch blocks, erosion stops, mattes, mulches, and vegetative covers. In addition, KMG would implement a revegetation program as soon as possible to reestablish the soil protection afforded by vegetation.
13. Once an area is no longer needed for production, it will be reclaimed in accordance with BLM-approved reclamation guidelines. Once the project is complete, final reclamation will be conducted. The following measures would be implemented during final reclamation:
    - Rip or subsoil all surfaces to be re-contoured to a depth of 12 inches;
    - Restore topography to near pre-existing contours at the well sites, along access roads and pipelines, and other facilities sites;
    - Redistribute up to 6 inches of topsoil or suitable plant growth material, if available, over all disturbed surfaces;
    - Rip or subsoil all regarded surfaces to a depth of 12 to 14 inches to eliminate any compaction that may have occurred during final grading; and
    - Roughen the soil surface, apply fertilizer as required, seed, and mulch.
14. KMG would avoid constructing well pads and roads, where possible, on steep, gullied or severely eroded, or low reclamation potential lands such as map units 9, 17, 35, 37, 92, and 93 (**Figure 3-1**).

Water Resources

Some measures identified in Section 2.3.2.2, Soils, for protection of soil resources, such as use of erosion and sedimentation controls during road and drill pad construction, also would protect water resources. The following additional measures would be implemented as part of the Proposed Action to protect water resources:

1. Well sites, access roads, and pipelines would not be constructed within 500 feet of surface water and riparian areas without BLM approval. Where possible, a 100-foot-wide buffer of natural vegetation (not including wetland vegetation) would be maintained between construction and ephemeral and intermittent channels.
2. New roads would be designed and constructed in accordance with BLM road standards, such as those found in BLM's 9113–Roads Manual. BMPs for erosion control and hydrologic protection would be implemented during the construction, operation and reclamation of the project facilities.

3. Access road routes would be adjusted if necessary to avoid steep slopes adjacent to ephemeral or intermittent drainage channels. Locations on steep slopes that require deep, nearly vertical cuts and steep fill slopes would be avoided where possible or appropriately mitigated.
4. The area of disturbance within drainage channels would be minimized. Road channel crossings would be designed to minimize changes in channel geometry and subsequent alterations in flow hydraulics. Channel crossings would be constructed during periods of no-flow or low-flow. Disturbed channel beds would be regraded to the original geometric configuration and contain the same or similar bed material. Pipeline channel crossings would be constructed with pipe buried a minimum of 4 to 6 feet below the channel bottom, as specified by BLM. All crossings or encroachments of waters of the U.S. would be coordinated with the U.S. Army Corps of Engineers.
5. All wells would be cased and cemented in accordance with Onshore Oil and Gas Order No. 2 to contain all fluids and protect groundwater during drilling and well completion.
6. Reserve pits would not be constructed in areas of shallow groundwater or in natural watercourses. Reserve pits would be constructed in cut rather than fill materials, and lined with an impermeable liner to prevent contamination of groundwater and soils and to conserve water. Sufficient freeboard would be maintained in all reserve pits to prevent overflow. If leakage is found outside the pit, drilling operations would be shut down until the problem is corrected.
7. Hydrostatic test water used in conjunction with pipeline testing, and all water used during construction or dust abatement would be purchased from Price City or extracted from sources with any necessary approval of the State of Utah. Hydrostatic test water would be injected into an authorized deep injection well, in compliance with all applicable requirements.
8. If required, KMG would develop and implement a Storm Water Pollution Prevention Plan per Utah Department of Environmental Quality (UDEQ) regulations. All required UDEQ permits would be in place before storm water is discharged during construction activities.
9. KMG would take strict precautions to prevent pipeline breaks and other potential accidental discharges of oil or hazardous chemicals into adjacent streams. An oil Spill Prevention, Control, and Countermeasure (SPCC) Plan would be developed in accordance with federal regulations if oil is stored onsite in sufficient quantities. Spills and leaks would be cleaned up to prevent pollution of surface water or groundwater.

Vegetation, Wetlands, and Noxious Weeds

1. KMG will follow the Weed Plan in **Appendix C** as approved by BLM.
2. KMG would evaluate all project facility sites for occurrence and distribution of waters of the U.S., special aquatic sites, and jurisdictional wetlands. All project facilities would be located outside these sensitive areas. If complete avoidance is not possible, KMG would minimize impacts through modification and minor relocations. KMG will comply with applicable regulations for any activities that involve dredge or fill or wetlands.
3. An approved Pesticide Use Proposal would be obtained before herbicides or other pesticides are applied on BLM surface ownership lands to control noxious weeds.
4. Once an area is no longer needed for production, it will be reclaimed in accordance with BLM-approved reclamation guidelines. Once the project is complete, final reclamation will be conducted.
5. Disturbed areas would be seeded and stabilized in accordance with BLM-approved reclamation guidelines.

6. Off-road driving relating to project activities would be restricted to the ROW corridors, well pads, and approved access roads. Signs would be used to identify approved and restricted (i.e., no access allowed) roads.
7. KMG would avoid all known individuals and/or populations of special status species within occupied habitat during surface disturbance activities. Avoidance measures may include, but are not limited to, well pad relocation or modification, road and pipeline re-routes, and species relocation (i.e., hand removal of individuals and/or populations within surface disturbance-related areas into adjacent suitable habitat). KMG would consult with the BLM for relocation of species.

Range Resources and Other Land Uses

1. KMG would coordinate with the affected livestock operators to ensure that livestock control structures remain functional (as directed by the livestock operator) during drilling and production operations, and to coordinate timing of activities planned.
2. When necessary, traffic control and speed limits would be used to limit potential conflicts.
3. In areas where fences are crossed by new road construction, cattle guards will be installed in place of gates.
4. KMG would maintain range improvements during the construction period. KMG would repair any range improvements to a functional condition that are damaged as a result of construction activities.

Wildlife, Fisheries, and Special Status Species

1. KMG would prohibit unnecessary off-site activities of operational personnel near the drill sites. KMG also would inform all project employees of applicable wildlife laws and the potential penalties associated with unlawful take and harassment.
2. KMG will not construct any facilities within crucial winter range for mule deer and elk during these dates December 1 to April 15 unless an exception, waiver or modification is authorized by the BLM.
3. In order to avoid collisions with big game, roads constructed within the project area would have a designed speed of 15 mph.
4. In the event that construction of the proposed facilities should occur during the raptor breeding season (February 1 through August 15), a raptor survey would be conducted, in coordination with the BLM and Utah Department of Water Resources (UDWR).
5. KMG would use BLM BMPs regarding raptor nest protection, which are BLM-specific recommendations for implementation of the U.S. Fish and Wildlife Service (USFWS), Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances. This generally includes a buffer around an active nest (e.g., 1.0 mile for bald eagle and peregrine falcon, 0.5 mile for golden eagle, ferruginous hawk, red-tailed hawk, and 0.25 mile for great-horned owl, prairie falcon, and burrowing owl). KMG would not operate inside these buffers unless an exception, waiver or modification is authorized by the BLM.
6. In coordination with the BLM and UDWR, raptor nests would be inventoried annually to evaluate potential nesting activity in areas where work may be occurring during the raptor nesting period from February 1 to August 15.
7. All pits and open cellars would be fenced for the protection of wildlife and livestock. Fencing would be in accordance with BLM specifications. Netting would be placed over all reserve or production pits to eliminate any hazard to migratory birds or other wildlife.
8. To protect nesting birds, removal of migratory bird habitat within the project area would be avoided between April 15 and August 1. Should removal of habitat be required during this period, KMG would coordinate with the BLM and UDWR to conduct breeding bird surveys in high value breeding habitat and implement

appropriate mitigation, such as buffer zones around occupied nests (BLM-sensitive and Birds of Conservation Concern [BCC] species), as needed.

9. KMG would avoid leaving trenches open overnight. Where trenches cannot be back-filled immediately, escape ramps should be constructed at least every 90 meters (300 feet). Escape ramps can be short lateral trenches or wooden planks sloping to the surface. The slope should be less than 45 degrees (1:1).
10. KMG would inspect trenches that have been left open overnight. Any animals discovered shall either be allowed to escape before activities resume or carefully removed from the trench and allowed to escape. A final inspection of the open trench segment shall also be made immediately prior to backfilling.
11. KMG would keep trenching and back-filling crews close together, to minimize the amount of open trenches at any given time. Efforts will be made to minimize the length of open trench along the ROW.
12. KMG would install soft ditch-plugs at known ungulate crossing sites, if pipeline trenching conflicts with spring or fall ungulate movement across pipeline construction area. During excavation of trenches, escape ramps consisting of loose earth deposited in the trench shall be placed to facilitate the escape of any wildlife species that may enter the excavations.
13. KMG would not conduct surface disturbing activities between May 15 and June 15 in crucial pronghorn range unless an exception, waiver or modification is authorized by the BLM.
14. Prior to the initiation of surface disturbance activities on federal sections (including workover and maintenance activities), applicable biological surveys would be conducted through areas of suitable habitat for sensitive species (i.e., federally listed species and BLM-sensitive species) during the appropriate season, as determined by the BLM. Additional mitigation measures would be determined during the APD onsite process.
15. Prior to the initiation of surface disturbance activities on federal sections (including workover and maintenance activities), black-footed ferret clearance surveys would be conducted in active white-tailed prairie dog colonies that have a burrow density of eight burrows per acre or greater, and that would be directly disturbed by the Proposed Action. Additional mitigation measures would be determined during the APD onsite process.
16. KMG would contribute funds in an amount not to exceed $75,000 for the proposed Pinyon-juniper removal project located in Sections 22 and 23 of Township 13 South and Range 10 East in Carbon County, Utah.

Cultural Resources

1. A Class III inventory for cultural resources has been done for wells for which siting location has been determined. For future wells, and if the area of potential effect were to change, additional inventory would be required.
2. Avoidance is the preferred method for mitigating adverse effects to a property that is considered eligible for, or is already on, the National Register of Historic Places (NRHP).
3. Adverse effects to cultural or historical properties that cannot be avoided would be mitigated by preparing and implementing a cultural resources protection plan. Protection plans would be developed as needed for eligible sites that would be impacted.
4. If cultural resources are discovered at any time during construction, all construction would halt and BLM would be immediately notified. Work would not resume until BLM issues a Notice to Proceed.

Transportation

1. Existing roads, if any, would be used as collectors and local roads whenever possible. Standards for road design would be consistent with BLM Road Standards

Manual Section 9113. The proposed access roads would be constructed to the BLM standard for a local road.

2. All roads on public lands that are not required for routine operation and maintenance of producing wells, ancillary facilities, or field production would be permanently blocked, recontoured, reclaimed, and revegetated.
3. Areas with important resource values, steep slopes, and fragile soils would be avoided where possible in planning for new roads.
4. Permits are required from Carbon County for any access to or across a county road or for any pipeline that crosses a county road. These permits would be acquired before additional roads are built. Roads on private lands would be reclaimed in a like manner to those on public lands, depending on the desires of the landowner.
5. KMG would be responsible for preventive and corrective maintenance of roads in the project area throughout the duration of the project. Maintenance may include blading, surfacing, cleaning ditches and drainage facilities, abating dust, controlling noxious weeds, or other requirements as directed by the BLM or the Carbon County Road and Bridge Department.
6. Except in emergencies, access would be limited to drier conditions to prevent severe rutting of the road surface. No construction or routine maintenance activities would be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 4 inches deep, the soil would be considered too wet to adequately support construction equipment. Culverts would be installed where needed to allow drainage in all draws and areas of natural drainage. Low water crossings would be used where applicable. Onsite reviews would be conducted with BLM personnel for approval of proposed access before any construction begins.

Health and Safety

1. Sanitation facilities installed on the drill sites, and any resident camps would be approved by the UDEQ.
2. To minimize undue exposure to hazardous situations, KMG would comply with all applicable rules and regulations (such as Onshore Orders and OSHA requirements) that would prevent the public from entering hazardous areas and would post warning signs to alert the public of truck traffic.
3. KMG would haul all garbage from the drill site to a state-approved sanitary landfill for disposal. In addition, KMG would collect and store any garbage or refuse on location in containers approved by the BLM until it can be transported.
4. During construction and when production operations begin, KMG would maintain an inventory of chemicals or hazardous substances for all items that may be at the site. KMG would institute a Hazard Communication Program for employees and would require subcontractors to establish programs in accordance with OSHA regulations at 29 CFR 1910.1200. These programs are designed to educate and protect employees and subcontractors with respect to any chemicals or hazardous substances that may be present in the work place. In addition, Material Safety Data Sheets would accompany every chemical or hazardous material that is brought on location and would become part of the file maintained by KMG. All employees would receive proper training in storage, handling, and disposal of hazardous substances.
5. SPCC plans would be written and implemented as necessary, in accordance with 40 CFR Part 112, to prevent discharge into navigable waters of the U.S.
6. If quantities that exceed 10,000 pounds or the threshold planning quantity as designated by the PFO are to be produced or stored in association with the project, chemical and hazardous materials would be inventoried and reported in accordance with the toxic release inventory requirements set forth in Title III of the SARA and codified at 40 CFR Part 335. The required Section 311 and 312 forms

would be submitted at the specified times to the state and county emergency management coordinators and the local fire departments.

7. Any hazardous wastes, as defined by the Resource Conservation and Recovery Act, would be transported and disposed of in accordance with all applicable federal, state, and local regulations.
8. All storage tanks and compressor facilities that are designed to contain oil, glycol, produced water, or other fluid that may constitute a hazard to public health or safety, must be surrounded by a secondary means of containment sufficient to contain 1.5 times the volume of the largest single tank within the containment area. The containment or diversionary structure must be constructed so that any discharge of oil, glycol, produced water, or other hazardous fluid from within the containment system does not drain, infiltrate, or otherwise escape to groundwater, surface water, or navigable waters before cleanup is completed.

Aesthetics

1. KMG will paint the building housing the pump skids at SWD well sites 41-25 and 31-30 so that they match the colors of nearby barns and farm buildings (a light/dark green combination in this case) and will paint the associated tanks a tan color that will blend in with the hills beyond. KMG will follow BLM BMPs and paint all other facilities using a BLM approved color to blend in with the surrounding environment. These actions will reduce the visual impact of these well sites.

Noise

1. KMG would muffle and maintain all motorized equipment according to manufacturer's specifications.
2. In any area of operations (such as a drill site or compressor station) where noise levels may exceed safe limits specified by OSHA, KMG would provide and require that employees use proper personal protective equipment.
3. The BLM will require that compressor engines located on public lands be enclosed in a building and located at least 600 feet away from sensitive receptors or sensitive resource areas to comply with these limits on noise levels.

Air Quality

1. KMG would adhere to all applicable ambient air quality standards, permit requirements (including preconstruction, testing, and operating permits), standards for motorized equipment, and other regulations, as required by the Utah Department of Air Quality (UDAQ).
2. KMG will not allow garbage or refuse to be burned at well locations or other facilities.
3. On federal land, KMG would immediately abate fugitive dust (by application of water, chemical dust suppressants, or other measures) when air quality is impaired, soil is lost, or safety concerns are noticed by KMG or identified by the BLM or the UDAQ. BLM would approve the control measure, location, and application rates. If watering is the approved control measure, the operator will obtain the water from state-approved sources in accordance with any applicable regulations.
4. KMG would follow manufacturers' specifications for the operation and maintenance of all facilities and vehicles to reduce emissions.
5. KMG would select the natural gas-fired compressor engines as appropriate to minimize potential emissions of nitrogen oxides (NO_x) and carbon monoxide (CO) at the new facilities.
6. KMG would follow UDAQ Best Available Control Technology (BACT) guidelines to minimize emissions.

Appendix B

Revegetation Plan For The Cardinal Draw II Coal Bed Methane Project

1.0 INTRODUCTION

Kerr-McGee Oil & Gas Onshore LP (KMG) proposes to develop coal bed methane resources within the Ferron coals and sands in Carbon County, Utah. KMG will implement the following revegetation plan to reclaim the proposed disturbances associated with the Cardinal Draw Coal Bed Methane Project. All disturbances proposed will be reclaimed including the well pads, salt-water disposal wells, and pipeline and utility corridors. All upgraded and newly constructed roads will be decommissioned and reclaimed except those the BLM or private landowner requests be kept open. Well pad and salt-water disposal well facilities will be dismantled and scrapped or moved to another site for use on future projects.

Revegetation activities at each disturbed site will begin as soon as possible given operational requirements. On all areas not needed for production, interim reclamation will be conducted as soon as possible after completion of construction to reduce the potential for erosion. This includes utility corridors and any portions of the well pads, salt-water disposal wells, and road travel surfaces disturbed during construction, but not needed during production. Interim reclamation and revegetation will be completed the first planting season following the conclusion of topsoil re-spreading and well pad grading.

Final reclamation and revegetation of the well pads, salt-water disposal wells, and road travel surfaces will be conducted the first planting season following project element decommissioning. All revegetation materials, methods, and techniques to be employed will be acceptable to the BLM and State of Utah.

2.0 RECLAMATION

KMG also plans to employ mechanical site stabilization measures at well pad sites and within road corridors as a part of this project. Both interim and final reclamation of individual facilities would involve three primary components. They are backfilling, grading, redistributing soils, and installing structures to control erosion. Additional information is provided for each of these activities *Chapter 2.0: Description of Alternatives, Including Proposed Action.* A summary of these actions is provided below.

Prior to grading and construction, soil will be stripped from the site to an average depth of 0.6 inches and stockpiled along the outer boundary of the proposed disturbance. The stockpile(s) will be protected from operational disturbances to maintain facility integrity. The stockpiles will assume as low a profile as possible to decrease wind erosion potential and be oriented, along the longitudinal axis, perpendicular to the prevailing wind direction, if possible, to reduce wind erosion. Stockpiles will be clearly identified with signs to distinguish them from subgrade or other construction materials.

Interim Reclamation

On areas previously disturbed and no longer needed for production, including portions of the wellpads not needed for operational and safety purposes, and reserve pits, interim reclamation will be conducted. Wellpad size will be reduced to the minimum size necessary to conduct safe operations. Cuts and fills will be reduced to a contour of 3:1 or shallower. Reserve pits will be closed and backfilled as soon as pit contents are dry, or by the end of the next full summer following rig release, whichever is first. Immediately upon well completion, any hydrocarbons or trash in the reserve and flare pits will be removed. Pits will be allowed to dry, be pumped dry, or solidified in-situ prior to backfilling. Pit liners will be buried after completion activities. If the pit liner was synthetic, the pit will not trenched or filled while containing fluids. The pit will then be backfilled with a minimum of five feet of soil material when it dries out. In flat areas, to account

for settling, and to promote surface drainage away from the backfilled pit, the pit area will be slightly mounded.

Interim reclamation will consist of backfilling and contouring the reserve pit area, back sloping and contouring all cut and fill slopes to an interim contour that blends with the surrounding topography as much as possible. Once contouring is complete, topsoil stockpiles will be then be re-spread over the disturbed area to preserve the topsoil as a growth medium for final reclamation. The re-spread topsoil will be revegetated with an interim reclamation certified weed-free seed mix designed by the BLM (See Tables 1 through 4). Prior to seeding, the seedbeds will be prepared by backfilling, leveling, and ripping all compacted areas. Contour cultivating to a depth of 4 to 6 inches will be conducted within 24 hours prior to seeding. To mitigate the contrast of recontoured slopes, cleared lines of vegetation will be feathered, and cleared trees, debris and rock will be saved and redistributed over recontoured cut and fill slopes.

Criteria for successful reclamation will include 70 percent of predisturbance cover, 90 percent of dominate species consisting of species in the seed mix and/or found in the surrounding natural undisturbed vegetation, and erosion features equal to or less than surrounding area or any criteria specified by the BLM.

Final Reclamation

For final reclamation facility structures would be removed and drill holes would be plugged and abandoned in accordance with Onshore Oil and Gas Order No. 2. Following the removal of the surface facility, reclamation would begin with backfilling, if necessary, and grading of the sites to approximate natural contours. The area would then be ripped to a depth of 12 inches to eliminate any compaction that may have occurred during final grading. The surface will be left in a slightly roughened condition to decrease erosion and promote site stability. Water bars and physical barricades may be implemented to promote site stabilization following grading.

Pipelines and subsurface power lines would be abandoned in place to avoid renewed surface disturbance. Pipelines will be cleaned by filling with water or nitrogen and pigging to remove the water or nitrogen. Reclamation and abandonment of pipelines and flowlines would require backfilling original cuts, reducing and grading cut and fill slopes to conform to the adjacent terrain, replacement of surface soil materials, water barring, and revegetation. All access roads constructed by the operator would be closed and reclaimed after well plugging and abandonment unless the landowner's and/or land managers request to keep any roads, and accept responsibility for future road maintenance. When the roads are decommissioned, the existing gravel surfacing will be removed and disposed of in an approved manner. Any unnecessary culverts or similar such improvements will also be excavated and disposed of. Natural drainage patterns will be restored along the road and constructed road crossings removed. Road reclamation may include ripping, scarifying, water barring, and barricading.

All final grading will be completed along the contour, where safety conditions permit, to minimize erosion and maximize site stability. Soil samples will then be taken for laboratory analysis. All surface equipment operations will be completed perpendicular to the slope angle where aerial and safety conditions permit.

For final reclamation, salvaged soil will be applied on areas to be revegetated within 30 to 60 days prior to seeding. Salvaged soil will be redistributed to an average depth of 0.5 feet in a manner that: (1) achieves an approximate uniform thickness consistent with safety requirements, post-disturbance land use objectives, and surface water drainage systems; (2) minimizes compaction and erosion of the soil resource; and (3) minimizes deterioration of the biological, physical, and chemical properties of the soil to the degree possible. Soil will be

applied in a single operation to minimize equipment passes over the resoiled area. Following soil redistribution, the disturbed area will be left in a roughened condition.

Final Revegetation

The primary objectives of revegetation are to stabilize the disturbed soils of the project area; establish adapted, self-sustaining, productive vegetation communities capable of supporting the planned post-disturbance land uses on disturbed areas, and; create useful wildlife habitat in terms of cover and food sources. To this end, a variety of grass, forb, and shrub species have been selected for planting based, variably, on their rapid establishment potentials, soil/hydrologic adaptations, and wildlife habitat values. In addition, the forb species selected for planting exhibit flowering characteristics valuable with respect to esthetic concerns. Seeding and/or planting would be repeated until satisfactory revegetation to pre-disturbance conditions is accomplished, as determined by the BLM or other landowner.

Final revegetation would occur after final grading and soil redistribution as described above. Final revegetation involves seedbed preparation, fertilization if necessary, seeding, and mulching. Seedbed preparation would be conducted immediately after grading, and soil redistribution. The seedbed will be harrowed or otherwise roughened to incorporate the fertilizer into the applied soil and prepare the area for seeding. Fertilizer will be broadcast over the seedbed at rates specified as a result of the laboratory analysis conducted as described above.

Seeding would be coordinated with other reclamation activities to occur as soon after seedbed preparation as possible. The seed mixtures to be planted, depending upon vegetation type disturbed, are depicted in Tables 1 through 4. Disturbance areas would be seeded using the appropriate revegetation mixture. Seeding would occur from October 1 to November 15 and from February 1 to March 31. Fall seeding is recommended based on local soil moisture conditions, germination requirements of selected species, and adaptation of seed to soil temperature. Spring seeding would be utilized if areas are ready for revegetation and access is possible. Mixed seedings, one seeding to plant cool season plants in early fall and one seeding to plant warm season plants in spring, would be timed to avoid competition between species and avoid seed distribution problems. Drill seeding would be used on most of the disturbed well site areas. Broadcast seeding would be employed on rocky areas, on steeper slopes, and on small disturbances. Where practical, broadcast seeding areas would be chained, harrowed or cultipacked to cover the seed. Where slope conditions allow, broadcast seeded areas would be dozer-tracked perpendicular to the slope. On small, isolated, or inaccessible sites, hand raking would be used to cover seed and ensure contact between the soil and the seed.

The planted area will then be mulched with the equivalent of 2 tons of certified weed-free hay or straw mulch per acre and the mulch anchored by crimping. Mulch should be evenly spread over the seeded area at rates dependent on seeding method and slope, as needed. Hydromulch at a rate of 0.5 to 0.75 tons per acre can be used in lieu of straw mulching as long as the seed is not applied simultaneously with the mulch.

Livestock grazing can occur on revegetated areas during the reclamation liability period as long as appropriate levels of grazing are maintained. As an adjunct planting operation, shrub seedlings will be planted on all well and facility site disturbed areas with slopes exceeding 2H:1V. The shrubs will be planted on 10-foot centers. The species to be planted and the areas within which planting will occur will be determined at the time of grading and resoiling.

Table 1. Seed Mixture For the Salt Desert Scrub Areas

Common Name	Scientific Name	Pounds per acres (PLS)[1]
Grasses		
ricegrass	*Achnatherum hymenoides*	2
wheatgrass	*Agropyron desertorum*	2
' Galleta	*Pleuraphis jamesii*	2
Forbs		
ax	*Linum perenne*	1
r's penstemon	*Penstemon palmeri*	1
berryleaf Globemallow	*Sphaeralcea grossulariifolia*	0.5
Shrubs		
ng saltbush	*Atriplex canescens*	2
e kochia	*Bassia prostrata*	2
r rabbitbrush	*Ericameria nauseosus*	1
fat	*Krascheninnikovia lanata*	2
	Total	15.5

[1] Seeding rate is listed as pounds per acre of pure live seed (PLS) drilled. Rate is increased by 50 percent if broadcast seeded (PLS = % seed purity x % seed germination)

[2] Shrub seed to be broadcast simultaneously with drilling. The seeding rate for herbaceous species will be doubled where broadcast seeding methods are used.

Table 2. Seed Mixture For the Sagebrush Shrubland/Grassland Areas

Common Name	Scientific Name	Pounds per acres (PLS)[1]
Grasses		
ricegrass	*Achnatherum hymenoides*	2
wheatgrass	*Agropyron desertorum*	2
eltail	*Elymus elymoides*	2
pike wheatgrass	*Elymus lanceolatus*	1
Forbs		
ax	*Linum perenne*	1
r's penstemon	*Penstemon palmeri*	1
burnet	*Sanguisorba minor*	1
Shrubs[2]		
ng saltbush	*Atriplex canescens*	2
cale saltbush	*Atriplex confertifolia*	2
r rabbitbrush	*Ericameria nauseosus*	1
ewood	*Sarcobatus vermiculatus*	1
	Total	16

[1] Seeding rate is listed as pounds per acre of pure live seed (PLS) drilled. Rate is increased by 50 percent if broadcast seeded (PLS = % seed purity x % seed germination)

[2] Shrub seed to be broadcast simultaneously with drilling. The seeding rate for herbaceous species will be doubled where broadcast seeding methods are used.

Table 3. Seed Mixture For the Pinyon-Juniper Areas

Common Name	Scientific Name	Pounds per acres (PLS)[1]
Grasses		
Indian ricegrass	*Achnatherum hymenoides*	2
Needle and thread grass	*Stipa comata*	2
Western wheatgrass	*Pascopyrum smithii*	2
Forbs		
Gooseberryleaf globemallow	*Sphaeralcea grossulariifolia*	0.5
Palmer's penstemon	*Penstemon palmeri*	0.5
Shrubs[2]		
Fourwing saltbush	*Atriplex canescens*	1
Birchleaf mountain mahogany	*Cercocarpus montanus*	1
Antelope bitterbrush	*Purshia tridentata*	1
	Total	10

[1] Seeding rate is listed as pounds per acre of pure live seed (PLS) drilled. Rate is increased by 50 percent if broadcast seeded (PLS = % seed purity x % seed germination)

[2] Shrub seed to be broadcast simultaneously with drilling. The seeding rate for herbaceous species will be doubled where broadcast seeding methods are used.

Table 4. Seed Mixture For the Riparian Areas

Common Name	Scientific Name	Pounds per acres (PLS)[1]
Grasses		
canarygrass	*Phalaris arundinacea*	2
pike wheatgrass	*Elymus lanceolatus* spp. *lanceolatus*	4
ska sedge[2]	*Carex nebrascensis*	
ush[2]	*Juncus balticus*	
Shrubs[2]		
fat	*Krascheninnikovia lanata*	1
bush sumac	*Rhus trilobata*	2
Trees		
leaf cottonwood[2]	*Populus angustifolia*	
	Total	15

[1] Seeding rate is listed as pounds per acre of pure live seed (PLS) drilled. Rate is increased by 50 percent if broadcast seeded (PLS = % seed purity x % seed germination)

[2] Sedge and rush root mass plugs, and cottonwood bare stock plantings would be done in the spring, within one month after high water flows, when the riparian water table and soil moisture would ensure planting success

Rate of plantings per linear feet of disturbed stream bank is as follows: sedge and rush root mass plugs, one 4-inch diameter plug per 5 linear feet; willows, one cutting per linear foot; and cottonwood stock, one cluster planting of 7 trees per 25 linear feet. Individual cottonwood stock, within a planting cluster would be spaced two feet apart. The willows and cottonwoods would be planted adjacent to the stream bank in moist soil, yet above the normal water line.

Shrub seed sources would be from the states of Colorado and Utah and from areas above elevation of 4,000 feet above sea level. Seed from these sources would provide more winter tolerant plants, thus, increasing over-winter survival rates.

3.0 REVEGETATION SCHEDULE

Excavation and grading may ordinarily occur during any month of the year. However, revegetation activities are more limited with respect to the time of year in which they should be completed and should be timed to coincide with a recognized planting season. The following tables depict the Fall and Spring revegetation schedules, on a monthly basis, to be followed to achieve the revegetation objectives set for this project. Site conditions and/or climatic variations may require that these schedules be modified somewhat to achieve reclamation success.

Table 2. Fall Revegetation Schedule

Reclamation Technique	Month											
	J	F	M	A	M	J	J	A	S	O	N	D
Excavation/Grading						Any month						
Resoiling and/or Ripping (if necessary)									XXX			
Seedbed Material Sampling									XXX			
Fertilization										XXX		
Seedbed Preparation										XXX		
Seeding										XX		
Mulching										XX		
Seedling Planting (following year)			XX									

Table 3. Spring Revegetation Schedule

Reclamation Technique	Month											
	J	F	M	A	M	J	J	A	S	O	N	D
Excavation/Grading						Any month						
Resoiling and/or Ripping (if necessary)		XXX										
Seedbed Material Sampling		XXX										
Fertilization			XX									
Seedbed Preparation			XX									
Seeding			XX									
Mulching			XX									
Seedling Planting			XX									

Note: Weather and surface conditions permitting, the earlier in the season planting is completed the higher the potential for revegetation success.

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: UTU080563
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
7. UNIT or CA AGREEMENT NAME: N/A
8. WELL NAME and NUMBER: Wellington Federal 31-18
9. API NUMBER: 4300731389
10. FIELD AND POOL, OR WILDCAT: Ferron

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER CBM
2. NAME OF OPERATOR: Kerr-McGee Oil & Gas Onshore LP
3. ADDRESS OF OPERATOR: 1099 18th St. Ste 1800 CITY Denver STATE Co ZIP 80202 PHONE NUMBER: (720) 929-6832
4. LOCATION OF WELL
FOOTAGES AT SURFACE: 752' FNL, 1860' FEL LAT: 39.613700 LONG: 110.727533 COUNTY: Carbon
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE 18 14S 11E 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
10/28/2008	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Well Spud
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

Wellington Federal 31-18 was Spud 10/28/2008 13:00 (Rig: Pense Brothers 18).

NAME (PLEASE PRINT) Cindy B. Vue TITLE Regulatory Analyst
SIGNATURE CB Vue DATE 10/29/2008

(This space for State use only)

RECEIVED
OCT 30 2008
DIV. OF OIL, GAS & MINING

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

FORM 6

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

ENTITY ACTION FORM

Operator: Kerr-McGee Oil & Gas Onshore LP
Address: 1099 18th St. Ste 1800
city Denver
state CO zip 80202

Operator Account Number: N 2995
Phone Number: (720) 929-6832

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4300731389	Wellington Federal 31-18		NWNE	18	14S	11E	Carbon
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	17179	10/28/2008			10/30/08	
Comments: FRSD							

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)

Cindy B. Vue
Name (Please Print)
Signature
Regulatory Analyst
Title
10/29/2008
Date

RECEIVED
OCT 30 2008
DIV. OF OIL, GAS & MINING

(5/2000)

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU080563

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

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.

7. UNIT or CA AGREEMENT NAME: N/A

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

8. WELL NAME and NUMBER: Wellington Federal 31-18

2. NAME OF OPERATOR: Kerr-McGee Oil & Gas Onshore LP

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10. FIELD AND POOL, OR WILDCAT: Ferron

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 752' FNL, 1860 FEL LAT: 39.613700 LONG: 110.727533 COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE 18 14S 11E 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
10/31/2008	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Rig Released
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

This well has been drilled to TD 1832'
Well has been logged, evaluated and Surface and Production Casing has been set.
Drill Rig Pense Brothers 18 was released 10/31/08 13:15

Currently preparing well for Completion. Drilling Operation Summary will be attached with Completion Report when finished.
Thank you.

NAME (PLEASE PRINT) CINDY B VUE TITLE REGULATORY ANALYST

SIGNATURE Cindy B Vue DATE 11/03/2008

(This space for State use only)

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NOV 04 2008
DIV. OF OIL, GAS & MINING

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

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

5. Lease Serial No.
Refer to Attached Spreadsheet

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit of CA/Agreement, Name and/or No.
N/A

1. Type of Well
☐ Oil Well ☑ Gas Well ☐ Other

8. Well Name and No. 31-18
Wellington Federal ~~(Refer to Attached Spreadsheet)~~

2. Name of Operator
Kerr-McGee Oil & Gas Onshore LP

9. API Well No.
4300731389

3a. Address
1099 18th Street, Suite 1800
Denver, CO 80602

3b. Phone No. *(include area code)*
720-929-6832

10. Field and Pool or Exploratory Area
Ferron

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
14S 11E 18

11. Country or Parish, State
CARBON, UT

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☑ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Change Class of Cement
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Due to the lack of regional availability of Class "C" cement, Class "G" was used as a subsequent replacement for all Cardinal Draw wells operated by Kerr-McGee Oil & Gas Onshore LP (Please see attached spreadsheet of wells this applies to) . This blend provides more compressive strength and is thus a better engineered blend.

Each well's completion report will detail the amount used per well. Thank you.

COPY SENT TO OPERATOR
Date: 12·4·2008
Initials: KS

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
Cindy B. Vue

Title Regulatory Analyst

Signature Cindy B Vue

Date 11/17/2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title Pet. Eng.

Date 11/26/08

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office DOGM

Federal Approval Of This Action Is Necessary

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

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DIV. OF OIL, GAS & MINING

Kerr-McGee Oil & Gas Onshore LP
Cardinal Draw 2008 Program
Change to Class G Cement

Subsequent Sundry Notice:

Due to the lack of regional availability of Class "C" cement, Class "G" was used as a subsequent replacement for all Cardinal Draw wells operated by Kerr-McGee Oil & Gas Onshore LP (Please see attached spreadsheet of wells this applies to) . This blend provides more compressive strength and is thus a better engineered blend.

Each well's completion report will detail the amount used per well. Thank you.

WELL NAME		
Wellington Federal 32-24	43-007	31383
Wellington Federal 12-24	43-007	31392
Wellington Federal 23-24	43-007	31382
Wellington Federal 44-24	43-007	31384
Wellington Federal 43-13	43-007	31377
Wellington Federal 42-13	43-007	31376
Wellington Federal 11-18	43-007	31380
Wellington Federal 11-19	43-007	31385
Wellington Federal 24-07	43-007	31379
Wellington Federal 44-18	43-007	31390
Wellington Federal 22-07	43-007	31378
Wellington Federal 23-18	43-007	31391
Wellington Federal 31-18	43-007	31389
Wellington Federal 31-14	43-007	31371
Wellington Federal 21-14	43-007	31373
Wellington Federal 31-08	43-007	31388
Wellington Federal 34-14	43-007	31370
Wellington Federal 11-09	43-007	31387
Wellington Federal 41-09	43-007	31386
Wellington Federal 23-14	43-007	31372
Wellington Federal 11-12	43-007	31381

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

***SUBMIT IN TRIPLICATE** – Other instructions on page 2.*

5. Lease Serial No.
UTU080563

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit of CA/Agreement, Name and/or No.
N/A

1. Type of Well
☐ Oil Well ☑ Gas Well ☐ Other

8. Well Name and No.
Wellington Federal 31-18

2. Name of Operator
Kerr-McGee Oil & Gas Onshore LP

9. API Well No.
43-007-31389

3a. Address
1099 18th St. Ste 1800
Denver, CO 80202

3b. Phone No. *(include area code)*
720-929-6832

10. Field and Pool or Exploratory Area
FERRON

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
NWNE LOT 6 SEC 18 T 14S-R11E
752' FNL, 1860' FEL LAT: 39.613700 LONG: 110.727533

11. Country or Parish, State
CARBON, UT

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☑ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☑ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other _____
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	_____
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	_____

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Wellington Federal 23-18 had 1st Water Production of 363 bwpd on 12/10/2008 and no gas production.

Attached is Wellsite Security Diagram. Thank you.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
Cindy B. Vue

Title Regulatory Analyst

Signature CBVue

Date 12/11/2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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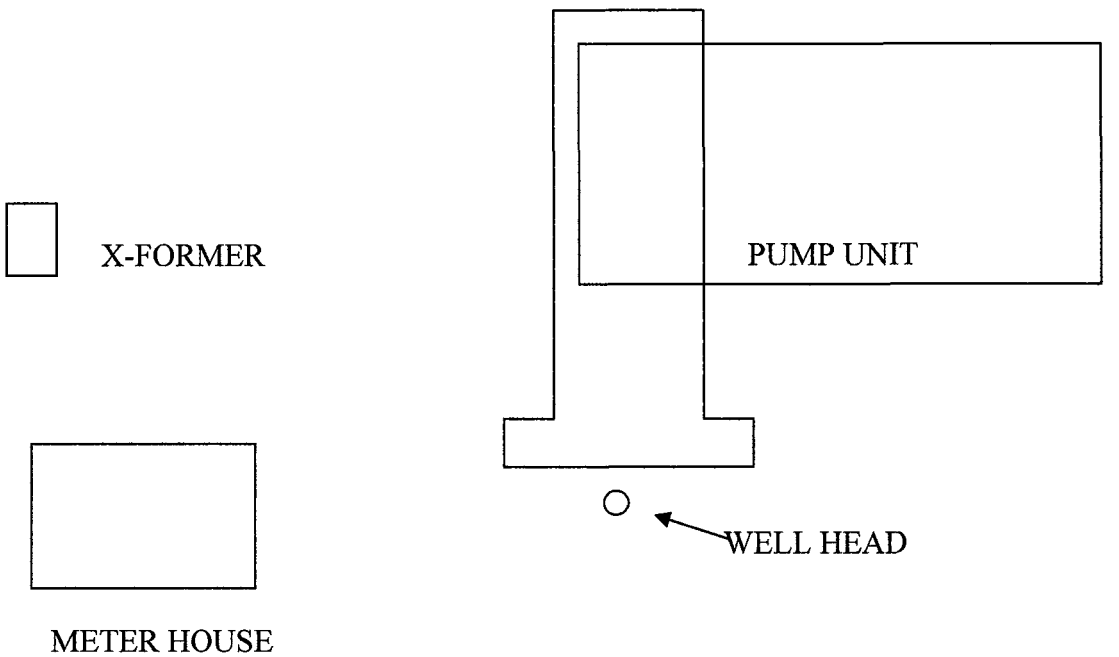
DEC 15 2008
DIV. OF OIL, GAS & MINING

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Wellsite Security Diagram
Wellington Federal 31-18
Lease # UTU080563



Wellington Federal 31-18
Lease # UTU080563
API # 43-007-31389
NWNE Lot 6 Sec 18-T14S-R11E
752' FNL, 1860' FEL
Lat: 39.613700 Long: 110.727533
Carbon County, Utah

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
UTU080563

1a. Type of Well ☐ Oil Well ☑ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☑ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,
Other: _____

6. If Indian, Allottee or Tribe Name
N/A

7. Unit or CA Agreement Name and No.
N/A

2. Name of Operator
Kerr-McGee Oil & Gas Onshore LP

8. Lease Name and Well No.
Wellington Federal 31-18

3. Address 1099 18th St. Ste 1800
Denver, CO 80202

3a. Phone No. *(include area code)*
720-929-6832

9. AFI Well No.
43-007-31389

4. Location of Well *(Report location clearly and in accordance with Federal requirements)**
At surface NWNE Lot 6 Sec 18 T14S-R11E
752' FNL, 1860' FEL LAT: 39.613700 LONG: 110.727533

10. Field and Pool or Exploratory
Ferron

11. Sec., T., R., M., on Block and Survey or Area Sec 18 T14S-R11E

At top prod. interval reported below
SAME AS SURFACE

At total depth SAME AS SURFACE

12. County or Parish
Carbon

13. State
UT

14. Date Spudded
10/28/2008

15. Date T.D. Reached
10/30/2008

16. Date Completed 12/10/2008
☐ D & A ☑ Ready to Prod.

17. Elevations (DF, RKB, RT, GL)*
5932' RKB

18. Total Depth: MD 1832'
TVD

19. Plug Back T.D.: MD 1745
TVD

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
GR, ~~Density, Neutron, Resistivity~~, CBL with GR/CCL/VDL SDI DSN, HRI

22. Was well cored? ☑ No ☐ Yes (Submit analysis)
Was DST run? ☑ No ☐ Yes (Submit report)
Directional Survey? ☑ No ☐ Yes (Submit copy)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
11"	8 5/8"/J-55	24#	0'	268'		120 sx Glass G	26	0'	N/A
7-7/8"	5.5"/J-55	15.5#	0'	1802'		405 sx Class G	87	0'	N/A

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-7/8"	1674.43'							

25. Producing Intervals

Formation	Top	Bottom
A) Ferron	1506	1663'
B)		
C)		
D)		

26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
1506'-1518'	.39"	4 SPF	Open
1524-1532' and 1550'-1572'	.39"	4 SPF	Open
1612'-1618'	.39"	12 SPF	Open
1643'-1663'	.39"	4 SPF	Open

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
1506'-1663'	Fracture 11/05/2008 with 3550 bbls Treated Water and 272,168# Sand

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
12/10/08	12/10/08	24	→	0	0	363			

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
			→	0	0	363		PGW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
			→					

*(See instructions and spaces for additional data on page 2)

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28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas *(Solid, used for fuel, vented, etc.)*

30. 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.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				Ferron	1440'
				Tunuck Shale	1760'

32. Additional remarks (include plugging procedure):

Drilling and Completion Operation Summaries are attached. Thank you.

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.)
- ☐ Geologic Report
- ☐ DST Report
- ☐ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
- ☐ Core Analysis
- ☑ Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name *(please print)* Cindy B. Vue Title Regulatory Analyst

Signature CBVue Date 12/12/2008

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

43-007-31369

ROCKIES

Operation Summary Report

Well: WELLINGTON FEDERAL 31-18			
Project: UTAH	Site: CARBON		Rig Name No: PENSE BROTHERS 18/18
Event: DRILLING	Start Date: 4/29/2008	End Date: 11/1/2008	Spud Date: 10/28/2008
Active Datum: RKB @5,932.00ft (above Mean Sea Level)	UWI: 0/14/S/11/E/18/0/NWNE/6/PM/N/752.00/E/0/1,860.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
4/29/2008	-		EVALPR	12	F	P		PREFABED WELLHEAD TO METER HOUSE, PIPE AND MATERIALS. METER HOUSE EQUIPMENT.
	-		EVALPR	12	F	P		PLUMB DRAIN AND RE-ROUTE VENTS ON METER HOUSE.
	-		EVALPR	12	F	P		SURVEY LOCATION; ENVIRONMENTAL SURVEYS, REPORTS, SERVICES; REGULATORY PERMITS; LAND CONTRACTS
10/28/2008	0:01 - 6:00	5.98	DRLSUR	12	D	P		WAITING ON DAYLIGHT
	6:00 - 13:00	7.00	DRLSUR	01	A	P		MOVE RIG , SPOT ON NEW LOCATION RIG UP
	13:00 - 14:00	1.00	DRLSUR	02	A	P		SPUD 13:00 BHA HAMMER , DRILL PILOT HOLE TO 4O ',LAY DOWN BHA, PU TRI-COME BHA, REAM TO 40 'LAY DOWN BHA
	14:00 - 17:30	3.50	DRLPRO	12	F	Z		PIPE YARD OUT OF 8 ROUND THREAD 13 3/8, HAD TO BUILD SWEDGE & FLOW TBE & XOVER FROM 8 RD TO BUTTRESS THREAD
	17:30 - 19:00	1.50	DRLPRO	11	A	P		PU SWDEGE, & DIVERTER,PUMP TO BOTTOM LAND CONDUCTER
	19:00 - 23:00	4.00	DRLPRO	02	A	P		PU HAMMER & DRILL TO 280'
	23:00 - 23:59	0.98	DRLPRO	11	B	P		RIG UP TO RUN 6 JTS 8 5/8 CSG 24#, J55 ST&C 267'
10/29/2008	-		DRLPRO					
	0:01 - 0:45	0.73	DRLPRO	11	B	P		RUN 6 JTS 268' 8 5/8" 24# J55 ST&C CSG
	0:45 - 2:15	1.50	DRLPRO	15	A	P		SAFETY MEETING RU SANJEL,BREAK CIRCULATION, DROP BALL,PUMP 25BBL PAD, PUMP 25.5 BBLS OFTYPE 010G CEMENT MIXTURE,@ 15.6#, WITH 2% CACL & 1/4#/SL CELLO FLAKE, YIELD 1.2, WATER 5.26 GAL/SK.DROP PLUG, DISPALCE WITH 14.2 BBL FRESH WATER, BUMP PLUG @ 02:15 HRS, FULL VOLUME RETURNS, 15 BBLS TO PIT SMALL AMOUNT OF FLOW BACK, REPRESSURED, SHUT MASTER VALVE, RIG DOWN .
	2:15 - 6:15	4.00	DRLPRO	12	B	P		WOC
	6:15 - 8:30	2.25	DRLPRO	13	A	P		NIPPLE UP BOP'S
	8:30 - 11:30	3.00	DRLPRO	13	A	P		WELD ON WELL HEAD
	11:30 - 16:30	5.00	DRLPRO	13	A	P		NIPPLE UP
	16:30 - 18:00	1.50	DRLPRO	13	A	P		TEST BOPS
	18:00 - 20:00	2.00	DRLPRO	13	A	P		NIPPLE UP PU BHA
	20:00 - 23:59	3.98	DRLPRO	02	A	P		DRLG
10/30/2008	0:01 - 12:30	12.48	DRLPRO	02	A	P		DRILL FROM 721 TO 1735 BIT QUIT DRLG
	12:45 - 14:00	1.25	DRLPRO	05	A	P		TOH FOR BIT CHANGE
	14:00 - 15:00	1.00	DRLPRO	05	A	P		PU USED HAMMER BIT, TIH, TAG @ 1612'
	15:00 - 21:00	6.00	DRLPRO	03	A	P		REAM TO PREVIOUS DEPTH
	21:00 - 22:00	1.00	DRLPRO	02	A	P		DRILL TO TD 1832'
	22:00 - 22:30	0.50	DRLPRO	04	A	P		CLEAN HOLE
	22:30 - 23:00	0.50	DRLPRO	04	A	P		FILL HOLE WITH WATER
	23:00 - 23:59	0.98	DRLPRO	05	A	P		TOH TO LOG
10/31/2008	0:01 - 0:45	0.73	DRLPRO	05	A	P		TOH TO RUN OPEN HOLE LOGS
	0:45 - 1:45	1.00	DRLPRO	08	A	P		RIG UP HALLIBURTON FOR OPEN HOLE LOGS

ROCKIES

Operation Summary Report

Well: WELLINGTON FEDERAL 31-18			
Project: UTAH	Site: CARBON		Rig Name No: PENSE BROTHERS 18/18
Event: DRILLING	Start Date: 4/29/2008	End Date: 11/1/2008	Spud Date: 10/28/2008
Active Datum: RKB @5,932.00ft (above Mean Sea Level)	UWI: 0/14/S/11/E/18/0/NWNE/6/PM/N/752.00/E/0/1,860.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
	1:45 - 4:15	2.50	DRLPRO	08	A	P		OPEN HOLE LOGS
	4:15 - 5:00	0.75	DRLPRO	08	A	P		RIG DOWN HALLIBURTON
	5:00 - 7:00	2.00	DRLPRO	11	A	P		RU TO RUN 5.5" CSG
	7:00 - 10:00	3.00	DRLPRO	11	A	P		RU TO RUN 5 1/2 15.'5# J55, ST&C CSG 1802"
	10:00 - 11:00	1.00	DRLPRO	15	A	P		RU CEMENTERS
	11:00 - 12:00	1.00	DRLPRO	11	A	P		PESSURE TEST TO 3000, FILL CSG & BREAK CIR, PUMP 1O BBL SCAVENGER, PUMP 84.2 BBL LEAD, DROP PLUG, DISPLACE WITH 41.8 BBL FRESH WATER, BUMP PLUG @ 500 OVER 1200 PSI. FLUSH BOP STACK, RIG DOWN
	12:00 - 13:00	1.00	DRLPRO	13	A	P		RIG DOWN BOPS, AND FLOW EQUIP, SET SLIPS
	13:00 - 13:15	0.25	DRLPRO	01	A	P		RELEASE RIG

ROCKIES

Operation Summary Report

Well: WELLINGTON FEDERAL 31-18			
Project: UTAH	Site: CARBON		Rig Name No:
Event: COMPLETION	Start Date: 11/5/2008	End Date: 11/25/2008	Spud Date: 10/28/2008
Active Datum: RKB @5,932.00ft (above Mean Sea Level)	UWI: 0/14/S/11/E/18/0/NWNE/6/PM/N/752.00/E/0/1,860.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
11/5/2008	-		COMP	36	B	P		MIRU BJ FRAC EQUIP & PHOENIX WIRELINE; PUMP 1st STAGE - AVG RATE804 BPM, AVG PRESS 1,604 PSI, MAX RATE 80 BPM, MAX PRESS 3,753 PSI, ISIP 947 PSI, 5 MIN 629 PSI,10 MIN 427 PSI, 15 MIN 350 PSI. RIH W/ FRAC PLUG & GUN. SET PLUG @ 1,590' TEST PLUG, OK; SHOT PERFS @ 1,506'-1,518' 1,524-1,532 1,550-1,572 POOH, RDMO WIRELINE. PUMP 2nd STAGE - AVG RAGE 75 BPM, AVG PRESS 1,927' PSI, MAX RATE - 81 BPM, MAX PRESS 2,270 PSI, ISIP 1,416' PSI, 5 MIN 1,125 PSI, 10 MIN 995 PSI, 15 MIN 896 PSI. RDMO FRAC EQUIPMENT
11/13/2008	-		COMP	30	A	P		MIRU; R/U TUBING EQUIPMENT. R/U MUD PUMP & HAND LINE. PREP AND TALLY TBG; SDFN
11/14/2008	-		COMP	30	A	P		PREP TBG; TAG FILL; R/U POWER SWIVEL, BREAK CIRC C/O TO PLUG. DRILL OUT PLUG, LOST CIRC SD WAIT FOR WATER PUMP 700 BBL'S, WAS ABLE TO REGAIN CIRC. RIH W/ TBG, TAG FILL @1,685' C/O TO 1,135' CIRC CLEAN. R/D POWER SWIVEL. POOH W/ TBG; SDFN
11/15/2008	-		COMP	30	A	P		R/U HAND LUINE, CHECK PSI, 0 RIH W/ TBG & R/U POWER SWIVEL, BREAK CIRC, TAG FILL. R/D POWER SWIVEL, L.D. TAG JTS. POOH W/ 46 JTS. TBG. L/D BIT AND BIT SUB. R/D TBG EQUIPMENT, N/D BOP, SET TAC, LANDED ON CAMERON KTH FLANGE W/ 20,000 TENSION ON TBG. N/U FLOW LINES ETC. R/U SWAB EQUIP. SDFN
11/16/2008	-		RDMO	47	A	P		FINAL REPORT
	-		COMP	30	A	P		R/U SWAB EQUIP; RIH MADE 48 RUNS, RECOVERED 120 BBL'S. R/D SWAB EQUIP "WATER STARTED TO GET SANDY". R/U FLOOR , R/U WELLHEAD, FLUSH TBG W/ 20 BBL'S, P.U NW PUMP &RODS. FILL AND STROKE TEST PUMP @ 1,000 PSI, GOOD, NO LEAKS. R/U UNIT, HANG OFF RODS. RDMO
11/25/2008	-		COMP			P		MOVE IN DOZER & BLADE; CLOSE DRILLING PIT. CONNTOUR LOCATION & RESEED. GRAVEL LOCATION.

Form 3[illegible]-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

5. Lease Serial No.
See Spreadsheet

6. If Indian, Allottee or Tribe Name
n/a

7. If Unit of CA/Agreement, Name and/or No.
n/a

1. Type of Well
☐ Oil Well ☑ Gas Well ☑ Other CBM

8. Well Name and No.
Wellington Federal (See Spreadsheet)

2. Name of Operator
Kerr-McGee Oil & Gas Onshore LP

9. API Well No.
See Spreadsheet 43-007-31389

3a. Address
1099 18th St. Ste 1800
Denver, CO 80202
Cindy.Vue@anadarko.com

3b. Phone No. *(include area code)*
720-929-6832

10. Field and Pool or Exploratory Area
Ferron

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
See Spreadsheet

11. Country or Parish, State
Carbon County, Utah

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☑ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Site Drawing
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Kerr-McGee respectfully submits the following site drawing for record on the following 19 wells on attached spreadsheet. Thank you.

RECEIVED
FEB 09 2009
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
Cindy B. Vue

Title Regulatory Analyst

Signature

Date 02/05/2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

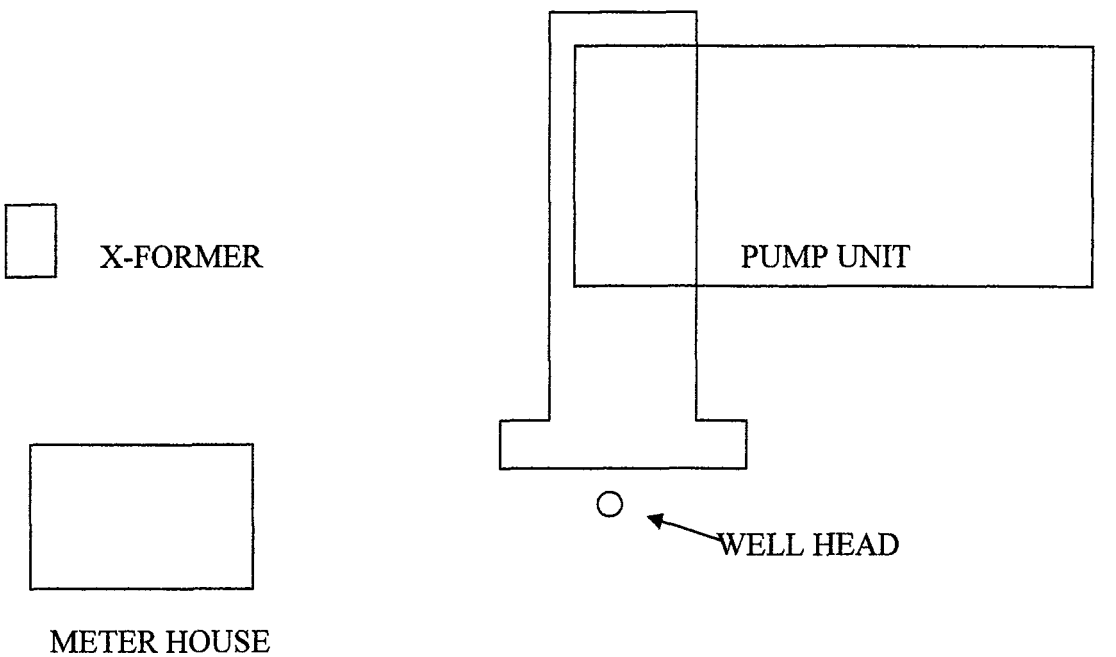
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Kerr-McGee respectfully submits the following site drawing for record on the following 19 wells. Thank you.

Well	API	Lease No.
Wellington Federal 23-24	43-007-31382	UTU073409
Wellington Federal 12-24	43-007-31392	UTU073409
Wellington Federal 32-24	43-007-31383	UTU073409
Wellington Federal 44-24	43-007-31384	UTU073409
Wellington Federal 43-13	43-007-31377	UTU073409
Wellington Federal 42-13	43-007-31376	UTU073409
Wellington Federal 24-7	43-007-31379	UTU073409
Wellington Federal 22-7	43-007-31378	UTU073409
Wellington Federal 31-8	43-007-31388	UTU073409
Wellington Federal 11-9	43-007-31387	UTU080560
Wellington Federal 41-9	43-007-31386	UTU080560
Wellington Federal 11-19	43-007-31385	UTU080563
Wellington Federal 11-18	43-007-31380	UTU080563
Wellington Federal 44-18	43-007-31390	UTU080563
Wellington Federal 23-18	43-007-31391	UTU080563
Wellington Federal 31-18	43-007-31389	UTU080563
Wellington Federal 21-14	43-007-31373	UTU081694
Wellington Federal 31-14	43-007-31371	UTU081694
Wellington Federal 11-12	43-007-31381	UTU082541

Wellsite Facility Diagram
Carbon County
Utah