

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

FORM 3
AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL		1. WELL NAME and NUMBER NBU 1022-03N4t
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		3. FIELD OR WILDCAT NATURAL BUTTES
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO		5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. OPERATOR PHONE 720 929-6587
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217		9. OPERATOR E-MAIL mary.mondragon@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU-01191-A	11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
13. NAME OF SURFACE OWNER (if box 12 = 'fee')		12. SURFACE OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')		14. SURFACE OWNER PHONE (if box 12 = 'fee')
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')		16. SURFACE OWNER E-MAIL (if box 12 = 'fee')
18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>		19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	467 FSL 2043 FWL	SESW	3	10.0 S	22.0 E	S
Top of Uppermost Producing Zone	467 FSL 2043 FWL	SESW	3	10.0 S	22.0 E	S
At Total Depth	467 FSL 2043 FWL	SESW	3	10.0 S	22.0 E	S

21. COUNTY UINTAH	22. DISTANCE TO NEAREST LEASE LINE (Feet) 167	23. NUMBER OF ACRES IN DRILLING UNIT 1363
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 20	26. PROPOSED DEPTH MD: 8800 TVD: 0
27. ELEVATION - GROUND LEVEL 5240	28. BOND NUMBER WYB-000291	29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496

ATTACHMENTS

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

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP

NAME Raleen White	TITLE Sr. Regulatory Analyst	PHONE 720 929-6666
SIGNATURE	DATE 12/22/2008	EMAIL raleen.white@anadarko.com
API NUMBER ASSIGNED 43047501670000	APPROVAL  Permit Manager	

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	7.625	0	2200		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2200	36.0			
	Cement Interval	Top (MD)	Bottom (MD)			
		0	2200			
		Cement Description	Class	Sacks	Yield	Weight
			Premium Foamed Cement	315	1.18	15.6

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	8800		
Pipe	Grade	Length	Weight			
	Grade I-80 LT&C	8800	11.6			
	Cement Interval	Top (MD)	Bottom (MD)			
		0	8800			
		Cement Description	Class	Sacks	Yield	Weight
			Premium Lite High Strength	420	3.38	11.8
			Pozzuolanic Cement	1390	1.31	14.3

Kerr-McGee Oil & Gas Onshore LP
NBU #1022-O3N4T
SECTION 3, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 8.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN AN NORTHEASTERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE EXISTING WELL #289 AND THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 55.9 MILES.

Kerr McGee Oil & Gas Onshore LP
NBU #1022-O3N4T
 LOCATED IN UINTAH COUNTY, UTAH
 SECTION 3, T10S, R22E, S.L.B.&M.

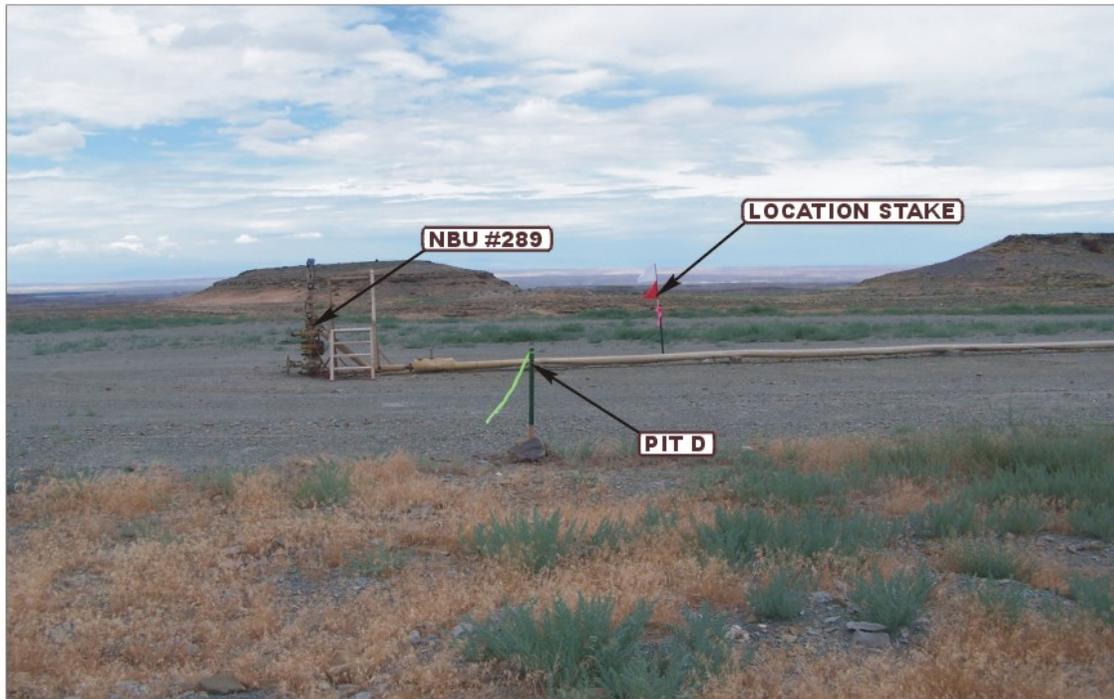


PHOTO: VIEW FROM PIT D TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: EASTERLY



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

LOCATION PHOTOS			08	18	08	PHOTO
			MONTH	DAY	YEAR	
TAKEN BY: D.K.	DRAWN BY: J.J.	REVISED: 00-00-00				

T10S, R22E, S.L.B.&M.

Kerr-McGee Oil & Gas Onshore LP

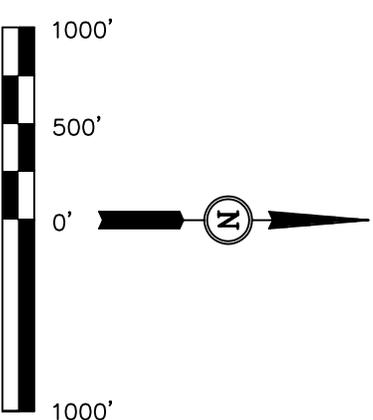
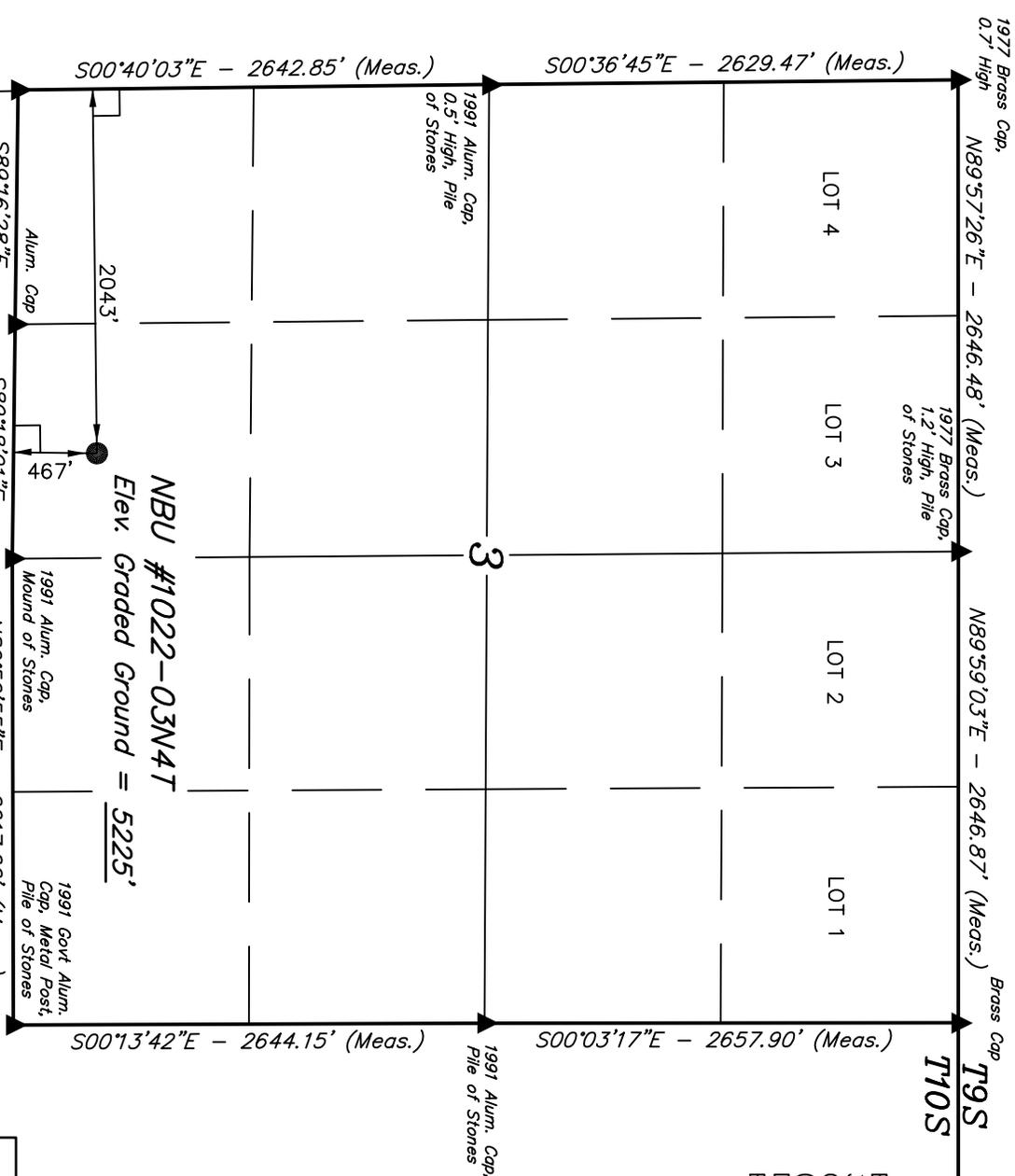
Well location, NBU #1022-03N4T, located as Shown in the SE 1/4 SW 1/4 of Section 3, T10S, R22E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

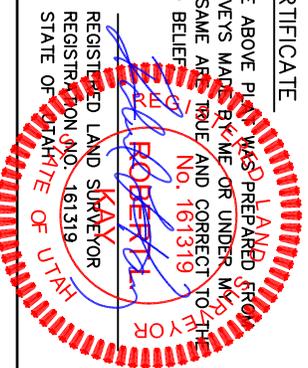
BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SERIES QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

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



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.



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

SCALE	1" = 1000'	DATE SURVEYED:	08-06-08	DATE DRAWN:	08-20-08
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PARTY	D.K. C.K. S.L.	REFERENCES	G.L.O. PLAT
WEATHER	WARM	FILE	Kerr-McGee Oil & Gas Onshore LP

- LEGEND:**
- ┌ = 90° SYMBOL
 - = PROPOSED WELL HEAD.
 - ▲ = SECTION CORNERS LOCATED.

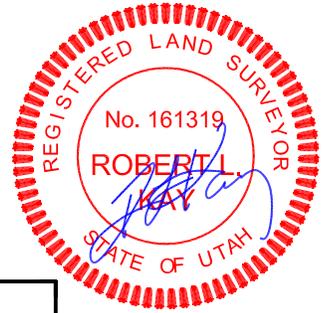
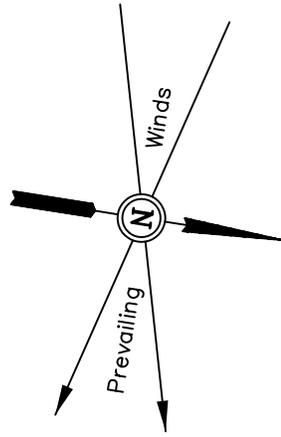
(NAD 83)
 LATITUDE = 39°58'19.21" (39.972003)
 LONGITUDE = 109°25'41.16" (109.428100)
 (NAD 27)
 LATITUDE = 39°58'19.33" (39.972036)
 LONGITUDE = 109°25'38.70" (109.427417)

Kerr-McGee Oil & Gas Onshore LP

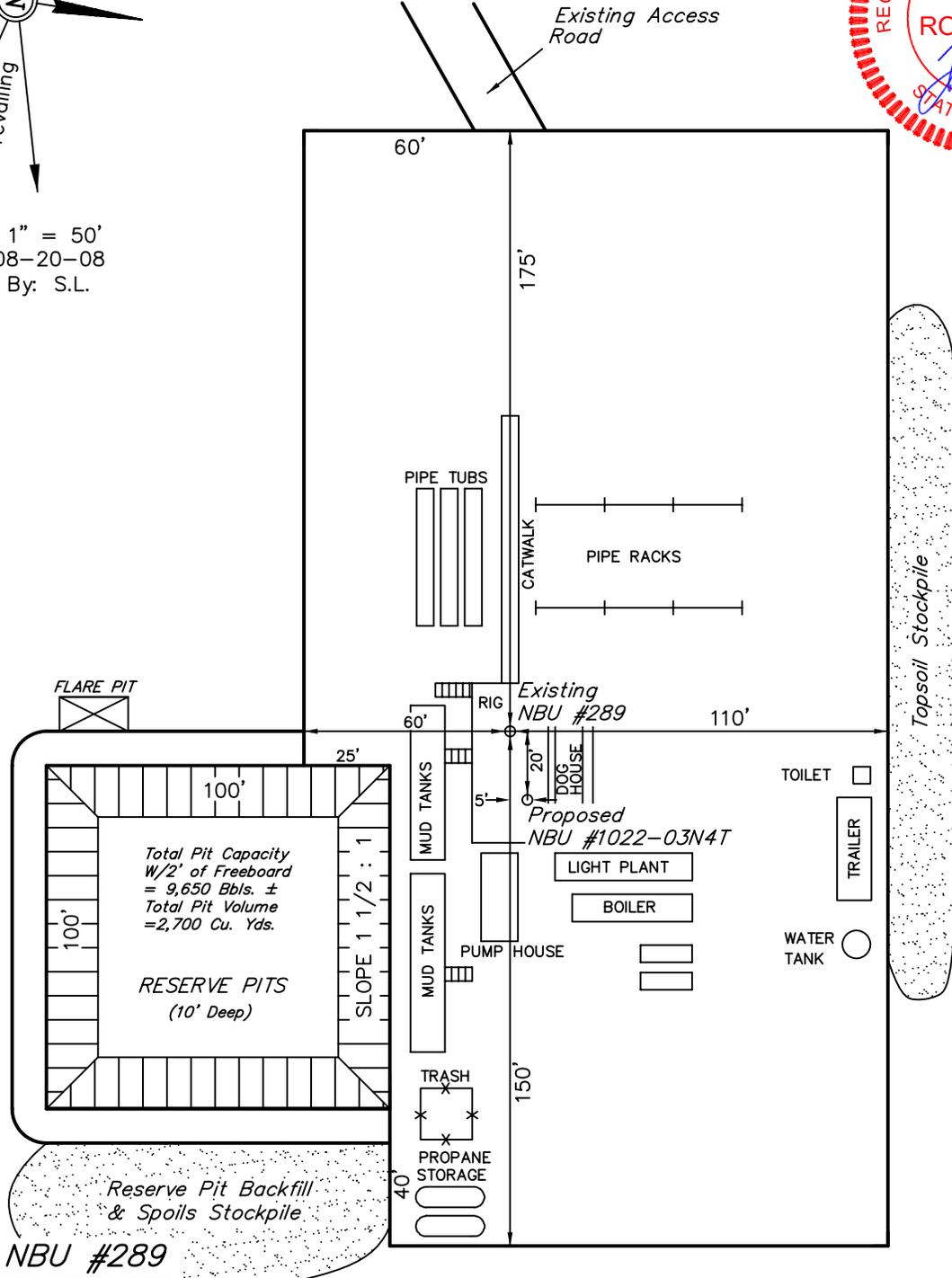
FIGURE #1

LOCATION LAYOUT FOR

NBU #1022-03N4T
SECTION 3, T10S, R22E, S.L.B.&M.
467' FSL 2043' FWL



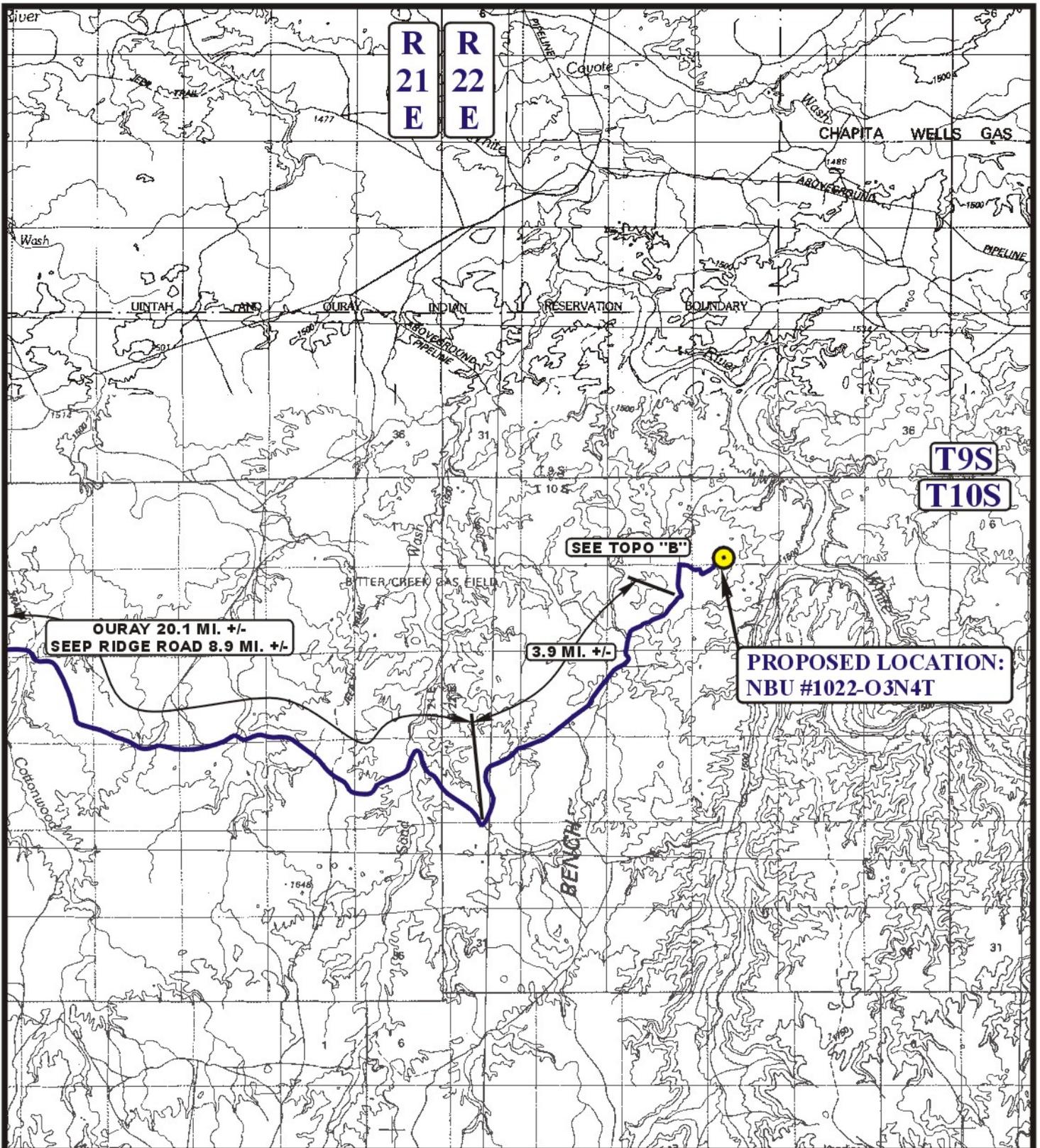
SCALE: 1" = 50'
DATE: 08-20-08
Drawn By: S.L.



(NAD 83)
LATITUDE = 39°58'19.13" (39.971981)
LONGITUDE = 109°25'41.40" (109.428167)
(NAD 27)
LATITUDE = 39°58'19.25" (39.972014)
LONGITUDE = 109°25'38.94" (109.427483)

NOTES:

FINISHED GRADE ELEV. AT LOC. STAKE = 5224.9'



LEGEND:

 PROPOSED LOCATION



Kerr McGee Oil & Gas Onshore LP

NBU #1022-03N4T

SECTION 3, T10S, R22E, S.L.B.&M.

467' FSL 2043' FWL



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

TOPOGRAPHIC
MAP

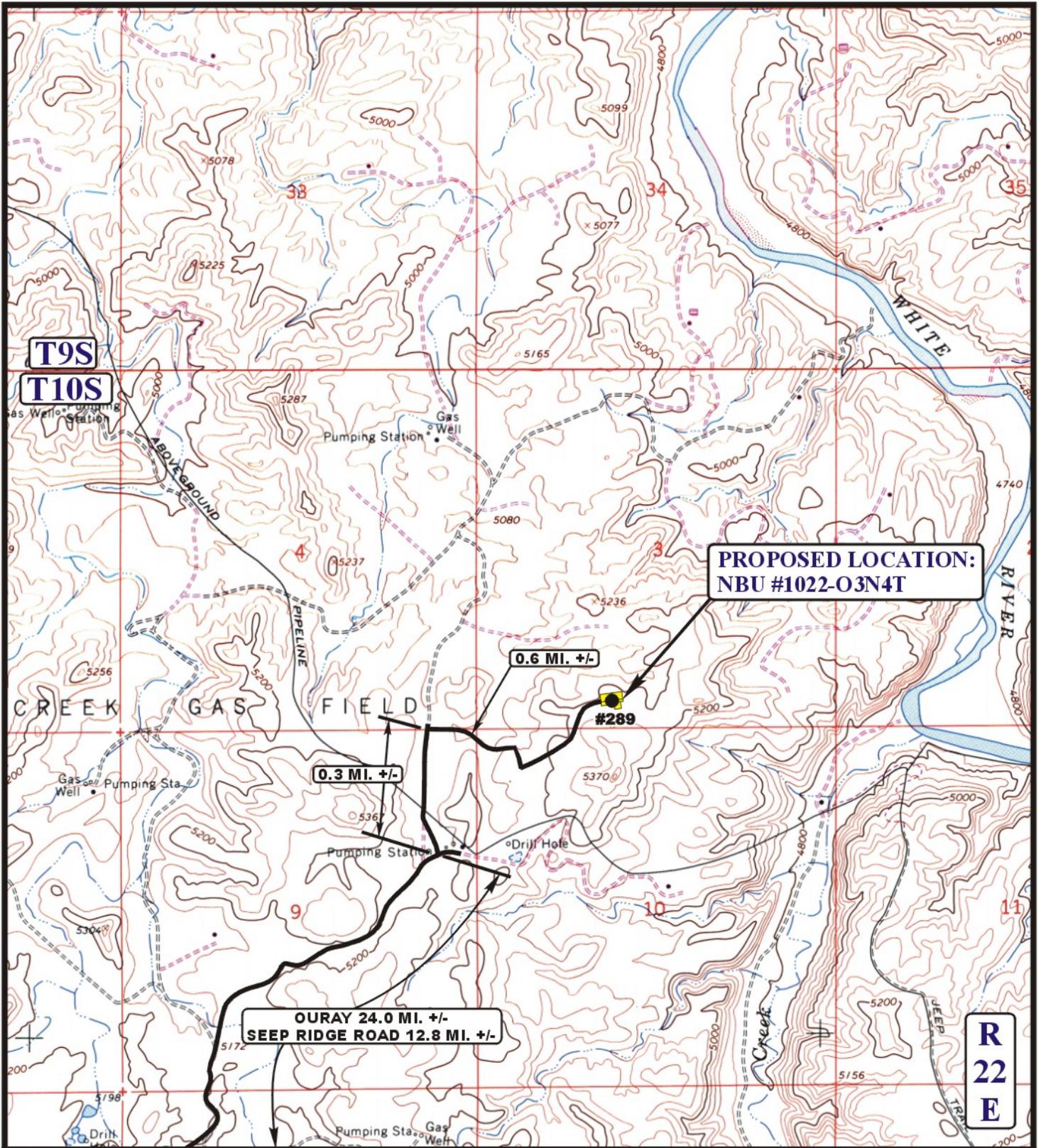
08 18 08
 MONTH DAY YEAR

SCALE: 1:100,000

DRAWN BY: J.J.

REVISED: 00-00-00





LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD



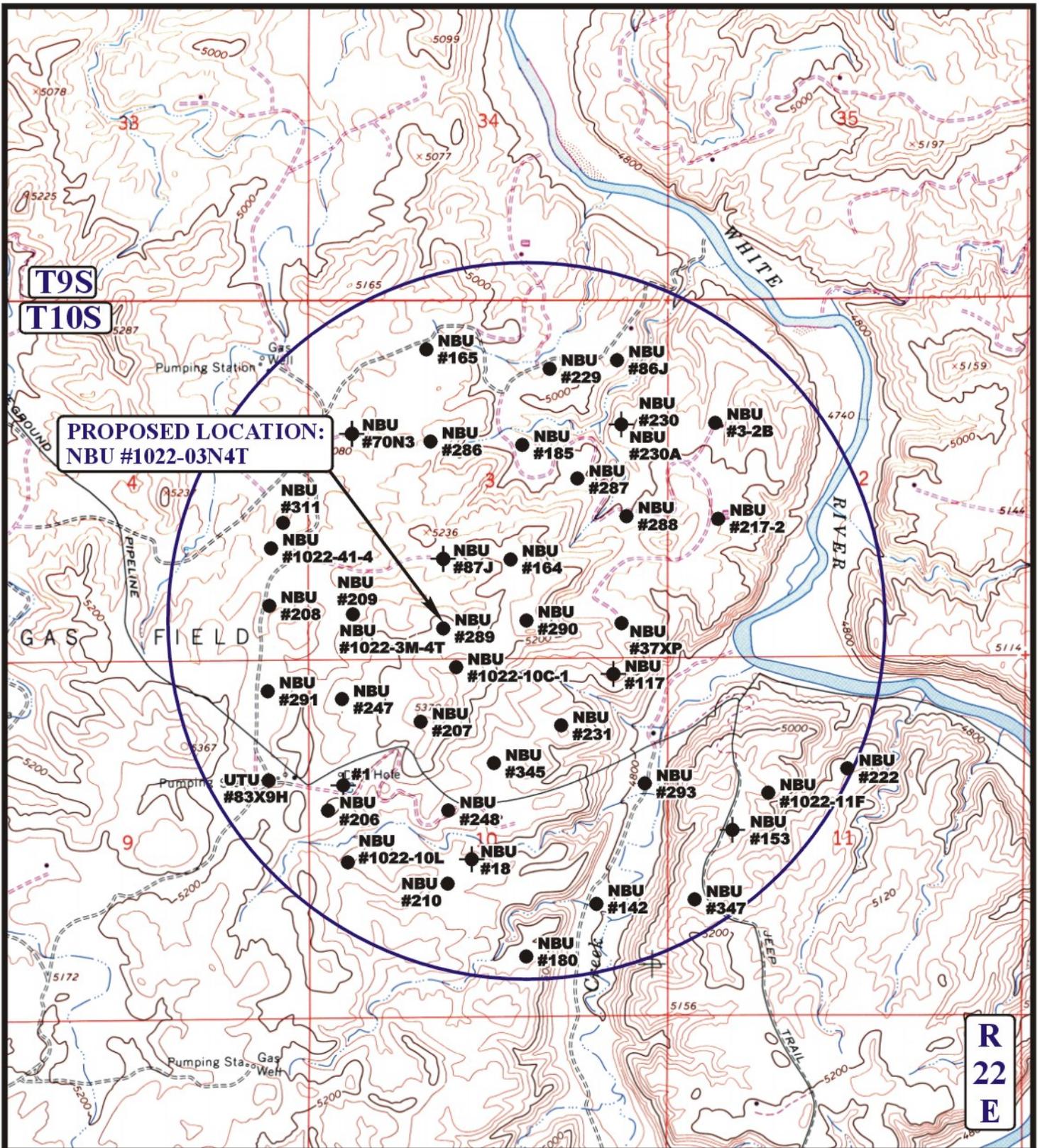
Kerr McGee Oil & Gas Onshore LP

NBU #1022-03N4T
SECTION 3, T10S, R22E, S.L.B.&M.
467' FSL 2043' FWL

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

TOPOGRAPHIC MAP **08 18 08**
 MONTH DAY YEAR
 SCALE: 1" = 2000' DRAWN BY: J.J. REVISED: 00-00-00

B
TOPO



**PROPOSED LOCATION:
NBU #1022-03N4T**

LEGEND:

- | | |
|-------------------|-------------------------|
| ⊗ DISPOSAL WELLS | ⊗ WATER WELLS |
| ● PRODUCING WELLS | ● ABANDONED WELLS |
| ● SHUT IN WELLS | ● TEMPORARILY ABANDONED |



Kerr McGee Oil & Gas Onshore LP

**NBU #1022-03N4T
SECTION 3, T10S, R22E, S.L.B.&M.
467' FSL 2043' FWL**



Utah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
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TOPOGRAPHIC MAP 08 18 08
MONTH DAY YEAR
SCALE: 1" = 2000' DRAWN BY: J.J. REVISED: 00-00-00



**NBU 1022-03N4T
NWSW Sec. 3, T10S,R22E
UINTAH COUNTY, UTAH
UTU-01191-A**

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers:

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1339'
Bird's Nest	1539'
Mahogany	2045'
Wasatch	4349'
Mesaverde	6695'
MVU2	7684'
MVL1	8261'
TD	8800'

2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1339'
	Bird's Nest	1539'
	Mahogany	2045'
Gas	Wasatch	4349'
Gas	Mesaverde	6695'
Gas	MVU2	7684'
Gas	MVL1	8261'
Water	N/A	
Other Minerals	N/A	

3. Pressure Control Equipment (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

4. Proposed Casing & Cementing Program:

Please see the Natural Buttes Unit SOP.

5. Drilling Fluids Program:

Please see the Natural Buttes Unit SOP.

6. Evaluation Program:

Please see the Natural Buttes Unit SOP.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 8800' TD, approximately equals 5456 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3520 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

Drilling is planned to commence immediately upon approval of this application.

9. **Variances:**

*Please see Natural Buttes Unit SOP Onshore Order #2 – Air Drilling Variance
Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2*

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet.

The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing.

The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole

to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above..

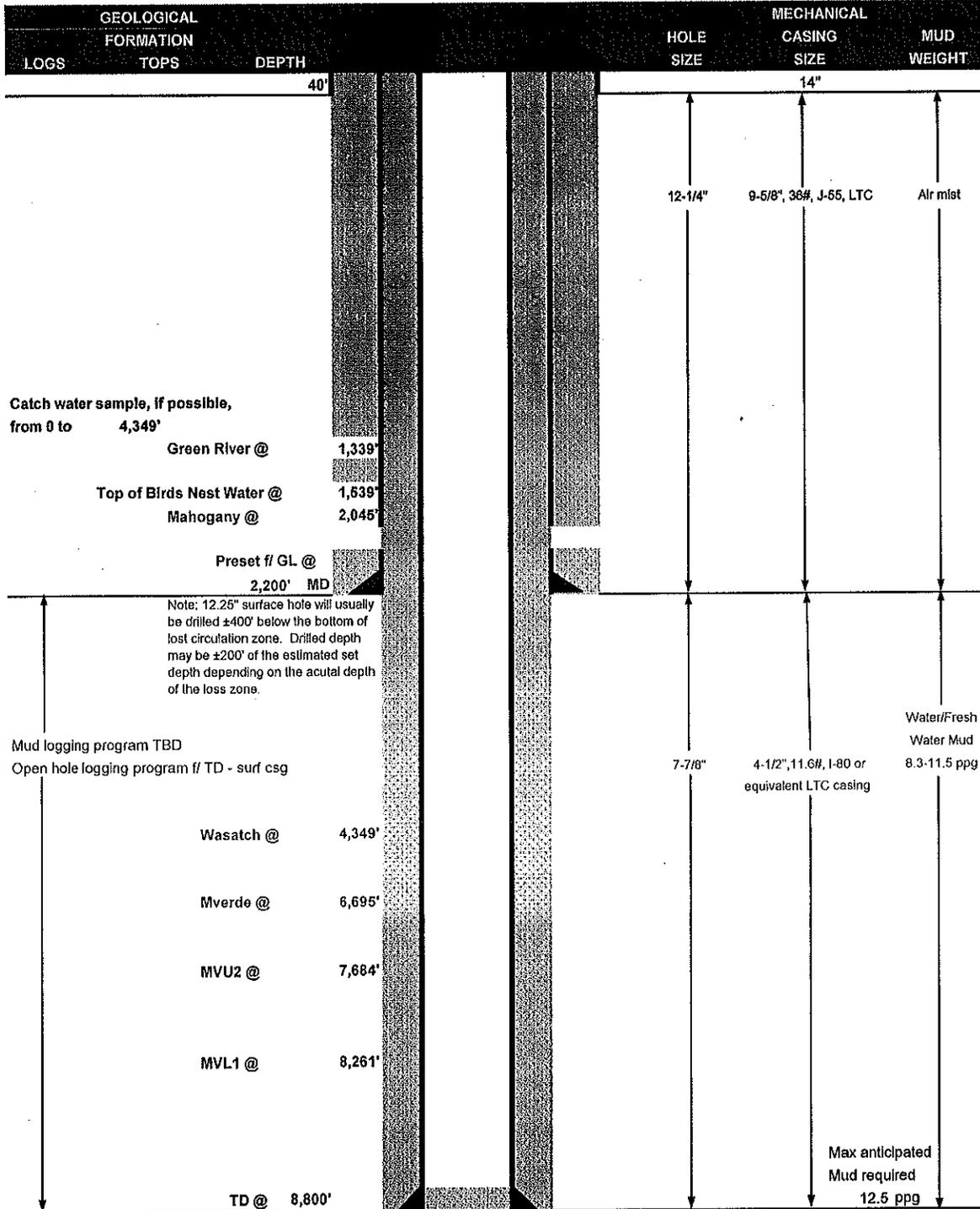
10. Other Information:

Please see Natural Buttes Unit SOP.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	September 11, 2008		
WELL NAME	NBU 1022-03N4T		TD	8,800' MD/TVD		
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	
		ELEVATION	5,225' GL		KB 5,240'	
SURFACE LOCATION	SESW 467' FSL, 2043' FWL, SECTION 3, T10S, R22E				BHL	Straight Hole
	Latitude: 39.972036	Longitude: -109.427417	NAD 27			
OBJECTIVE ZONE(S)	Wasatch/Mesaverde					
ADDITIONAL INFO	Regulatory Agencies: BLM (MINERALS), BLM (SURFACE), UDOGM, Tri-County Health Dept.					





**KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM**

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3520	2020	453000
SURFACE	9-5/8"	0 to 2,200'	36.00	J-55	LTC	0.93	1.98	6.53
						7780	6380	201000
PRODUCTION	4-1/2"	0 to 8800'	11.60	I-80	LTC	2.06	1.11	2.26

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
 - 2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)
- (Burst Assumptions: TD = 12.5 ppg) .22 psi/ft = gradient for partially evac wellbore
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
- MASP 4320 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + 25 pps floccle	215	60%	15.60	1.18
Option 1	TOP OUT CMT (1)	250	20 gals sodium silicate + Premium cmt + 2% CaCl + 25 pps floccle	100		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized					
Option 2	LEAD	2000	Prem cmt + 16% Gel + 10 pps gilsonite + 25 pps floccle + 3% salt BWO	230	35%	11.00	3.82
	TAIL	500	Premium cmt + 2% CaCl + 25 pps floccle	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,840'	Premium Lite II + 3% KCl + 0.25 pps cellulose + 5 pps gilsonite + 10% gel + 0.5% extender	420	60%	11.80	3.38
	TAIL	4,960'	50/50 Poz/G + 10% salt + 2% gel + 1% R-3	1390	60%	14.30	1.31

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained
 *Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.
 BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.
 Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.
 Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ DATE: _____
 Brad Laney
 DRILLING SUPERINTENDENT: _____ DATE: _____
 Randy Bayne
 NBU 1022-03N4T

NBU 1022-03N4T
SESW SEC 03 ,T10S,R22E
UINTAH COUNTY, UTAH
UTU-01191-A

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. **Existing Roads:**

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. **Planned Access Roads:**

No new access road is planned, as this is a twin location. Refer to Topo Map B.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

3. **Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

4. **Location of Existing & Proposed Facilities:**

Utilizing existing pipeline

Please see the Natural Buttes Unit SOP.

Variances to Best Management Practices (BMPs) Requested:

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Shadow Grey a non-reflective earthtone.

Interim Surface Reclamation Plan:

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the

original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

5. Location and Type of Water Supply:

Please see the Natural Buttes SOP.

6. Source of Construction Materials:

Please see the Natural Buttes SOP.

7. Methods of Handling Waste Materials:

Please see the Natural Buttes SOP.

A plastic reinforced liner is to be used. It will be a minimum of 20 mil thick and felt, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E (*Request is in lieu of filing Form 3160-5, after initial production*).

8. Ancillary Facilities:

Please see the Natural Buttes SOP.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be re-surveyed and a form 3160-5 will be submitted.

10. Plans for Reclamation of the Surface:

Please see the Natural Buttes SOP.

11. Surface/Mineral Ownership:

The well pad, access road and pipeline are located on lands owned by:

United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
(435)781-4400

12. Other Information:

A Class III archaeological survey, T&E Clearance and a paleontological survey have been performed and will be submitted.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

13. Lessee's or Operator's Representative & Certification:

Raleen White
 Sr. Regulatory Analyst
 Kerr-McGee Oil & Gas Onshore LP
 P.O. Box 173779
 Denver, CO 80217-3779
 (720) 929-6666

Randy Bayne
 Drilling Manager
 Kerr-McGee Oil & Gas Onshore LP
 1368 South 1200 East
 Vernal, UT 84078
 (435) 781-7018

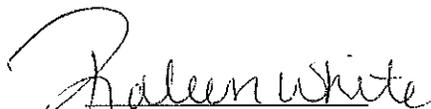
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

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

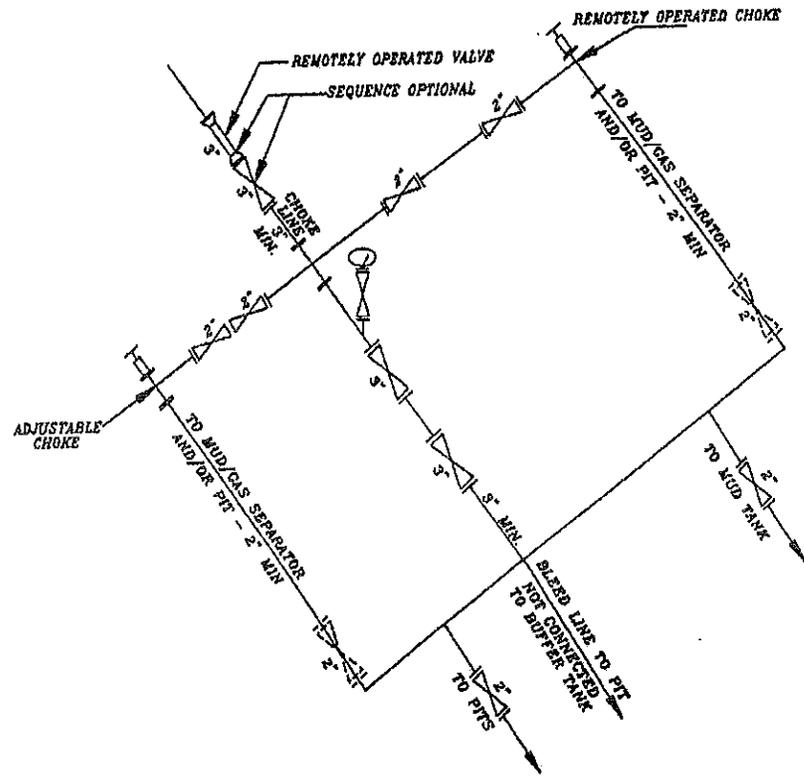
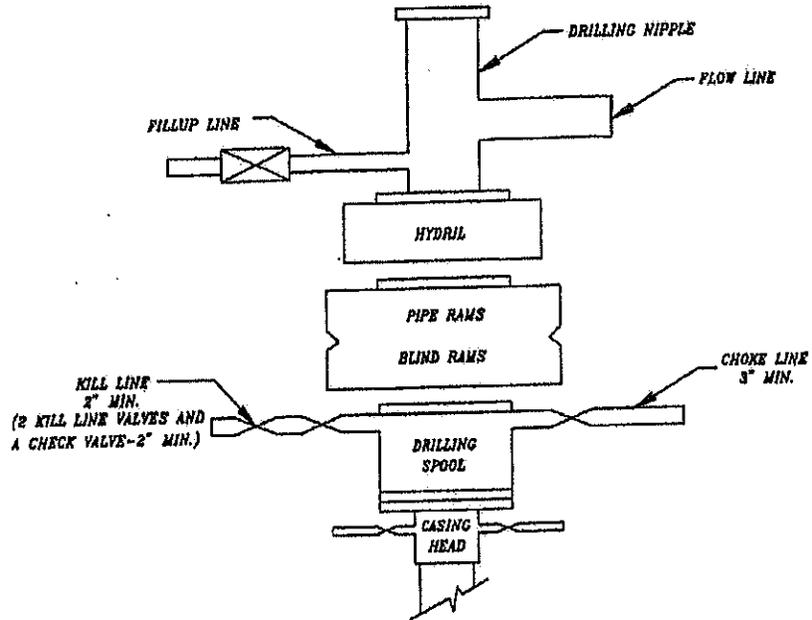
Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided Bureau of Land Management Nationwide Bond #WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.


 Raleen White

9/11/2008
 Date

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Kerr-McGee Oil & Gas Onshore LP
NBU #1022-O3N4T
SECTION 3, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 8.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN AN NORTHEASTERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE EXISTING WELL #289 AND THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 55.9 MILES.

Kerr McGee Oil & Gas Onshore LP

NBU #1022-O3N4T
LOCATED IN UTAH COUNTY, UTAH
SECTION 3, T10S, R22E, S.L.B.&M.

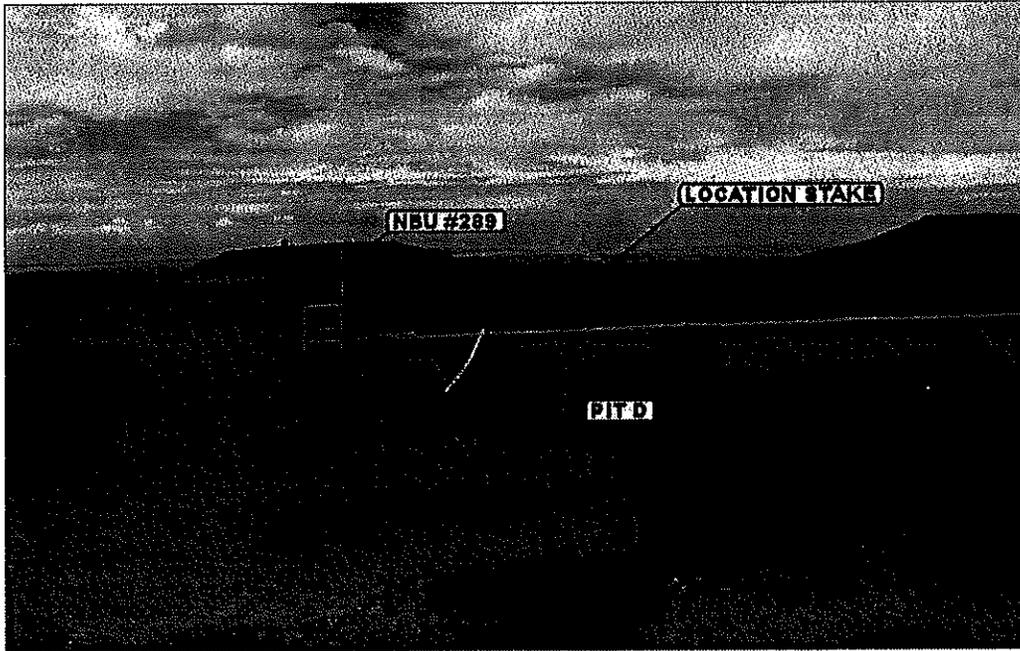


PHOTO: VIEW FROM PIT D TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: EASTERLY



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

LOCATION PHOTOS

08 | 18 | 08
MONTH | DAY | YEAR

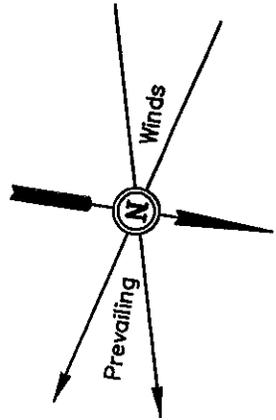
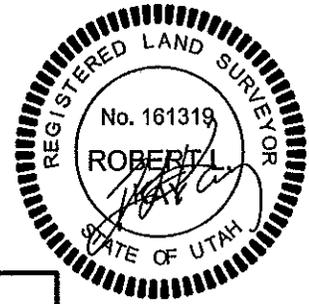
PHOTO

TAKEN BY: D.K. | DRAWN BY: J.J. | REVISED: 00-00-00

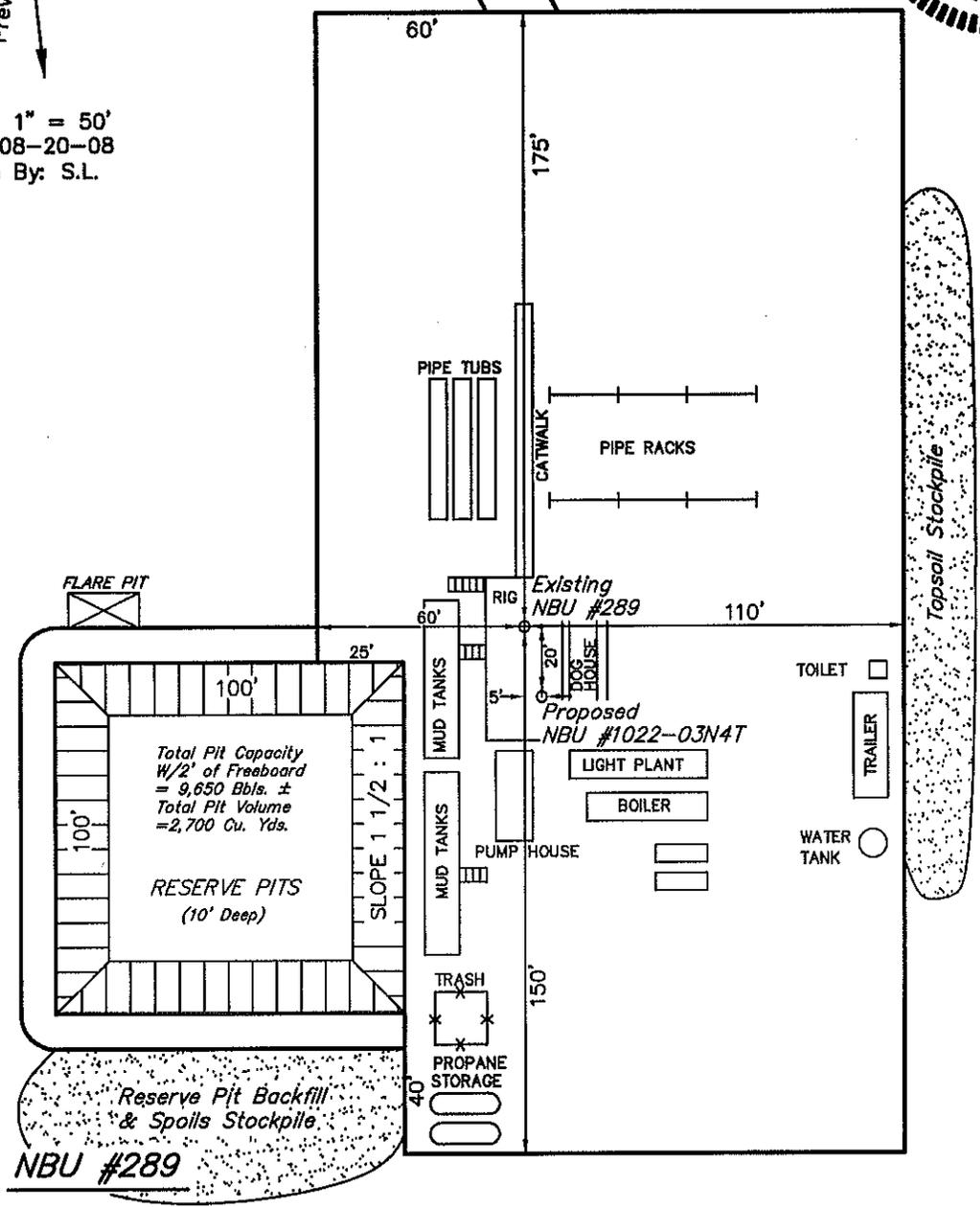
Kerr-McGee Oil & Gas Onshore LP

FIGURE #1

LOCATION LAYOUT FOR
 NBU #1022-03N4T
 SECTION 3, T10S, R22E, S.L.B.&M.
 467' FSL 2043' FWL



SCALE: 1" = 50'
 DATE: 08-20-08
 Drawn By: S.L.

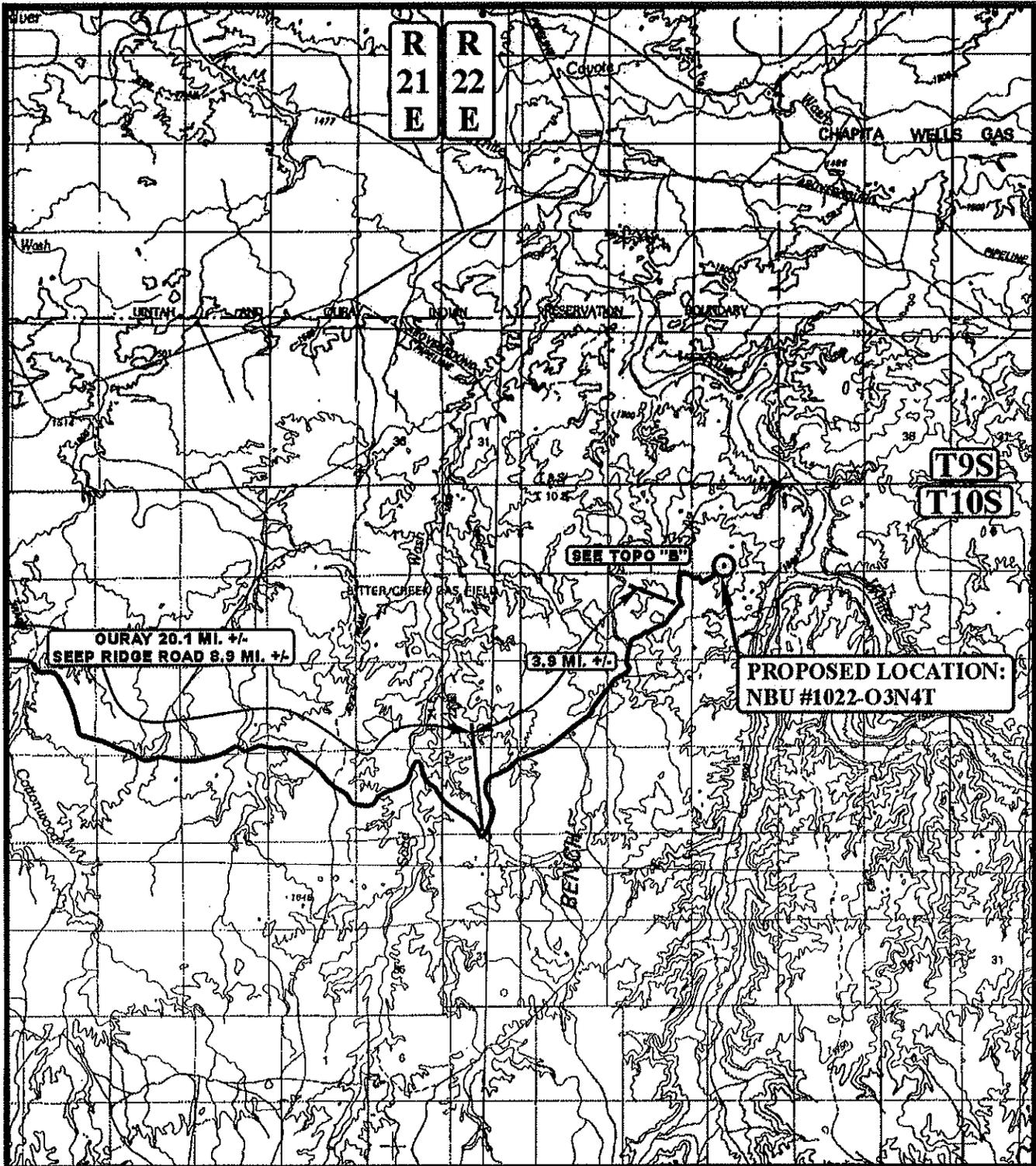


(NAD 83)
 LATITUDE = 39°58'19.13" (39.971981)
 LONGITUDE = 109°25'41.40" (109.428167)
 (NAD 27)
 LATITUDE = 39°58'19.25" (39.972014)
 LONGITUDE = 109°25'38.94" (109.427483)

NOTES:

FINISHED GRADE ELEV. AT LOC. STAKE = 5224.9'

UINTAH ENGINEERING & LAND SURVEYING
 86 So. 200 East * Vernal, Utah 84078 * (435) 788-1017



LEGEND:

⊙ PROPOSED LOCATION

Kerr McGee Oil & Gas Onshore LP

NBU #1022-03N4T

SECTION 3, T10S, R22E, S.L.B.&M.

467' FSL 2043' FWL



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

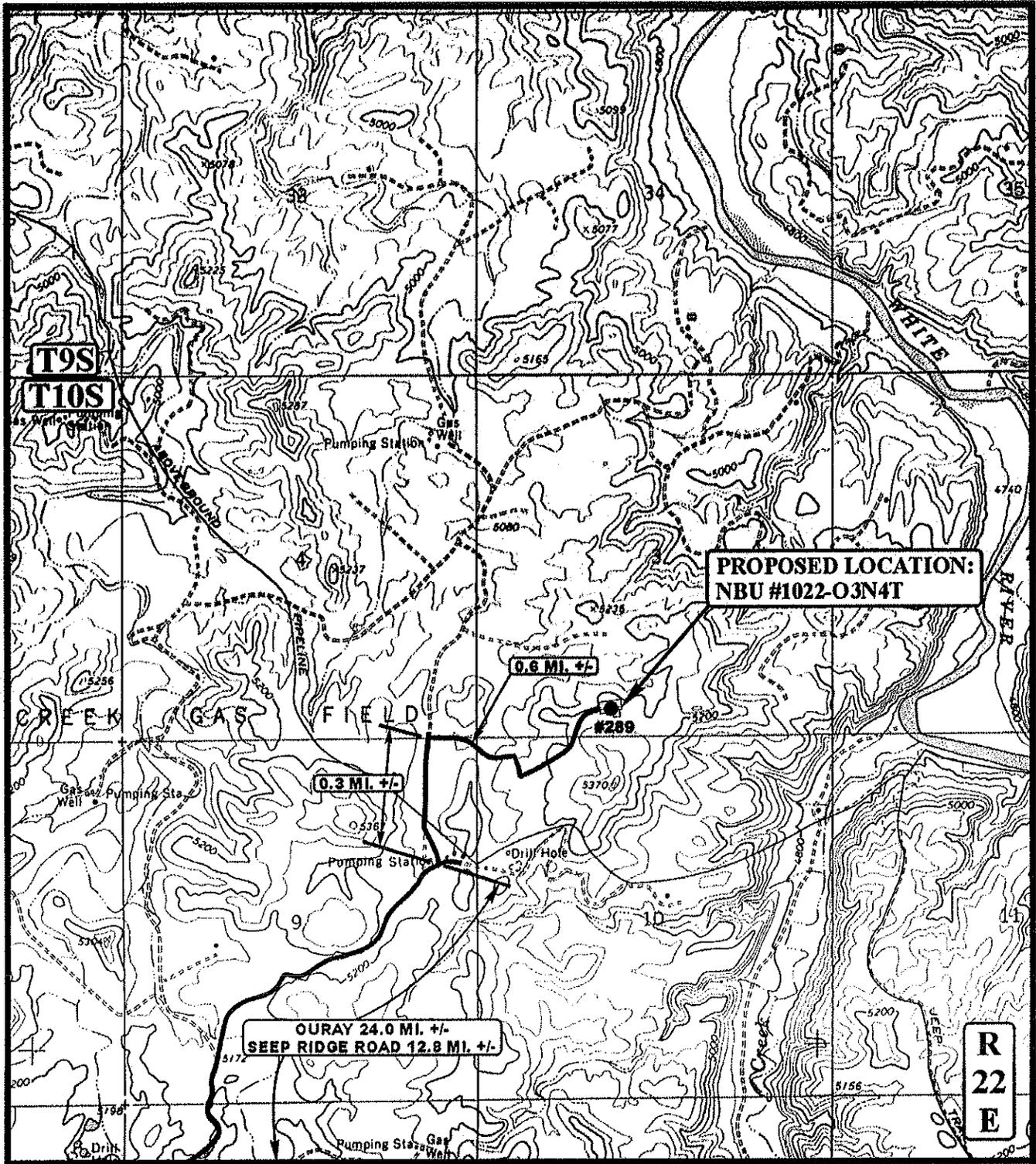
TOPOGRAPHIC
MAP

08 18 08
 MONTH DAY YEAR

SCALE: 1:100,000

DRAWN BY: J.J. REVISED: 00-00-00





LEGEND:
 ————— EXISTING ROAD
 - - - - - PROPOSED ACCESS ROAD

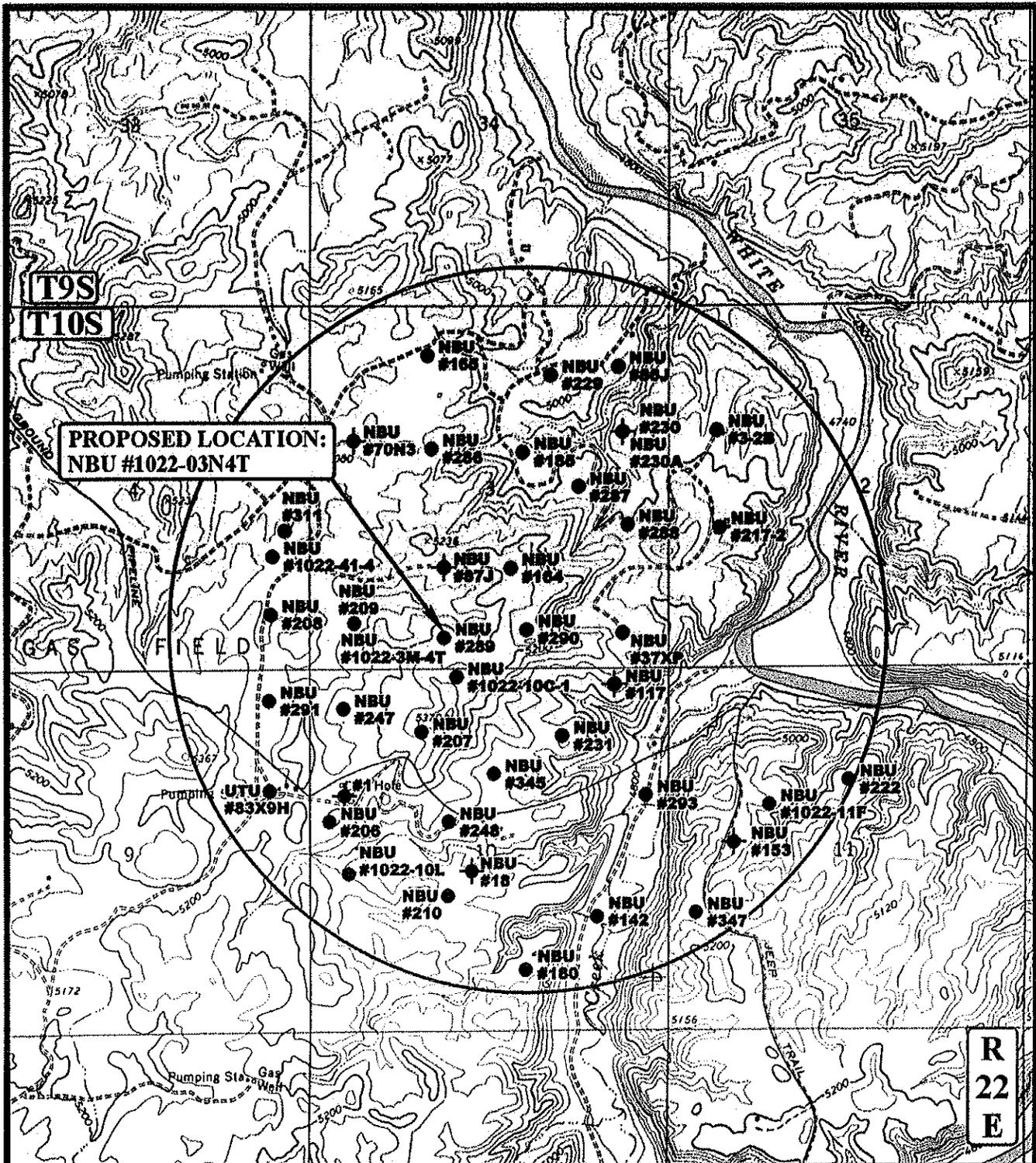


Kerr McGee Oil & Gas Onshore LP
 NBU #1022-O3N4T
 SECTION 3, T10S, R22E, S.L.B.&M.
 467' FSL 2043' FWL

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

TOPOGRAPHIC 08 18 08
MAP MONTH DAY YEAR
 SCALE: 1" = 2000' DRAWN BY: J.L. REVISED: 00-00-00

B
 TOPO



**PROPOSED LOCATION:
NBU #1022-03N4T**

**R
22
E**

LEGEND:

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



Kerr McGee Oil & Gas Onshore LP

**NBU #1022-03N4T
SECTION 3, T10S, R22E, S.L.B.&M.
467' FSL 2043' FWL**



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

**TOPOGRAPHIC
MAP**

08 18 08
MONTH DAY YEAR

SCALE: 1" = 2000'

DRAWN BY: J.J. REVISED: 00-00-00



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160
(UT-922)

October 6, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District
From: Michael Coulthard, Petroleum Engineer
Subject: 2008 Plan of Development Natural Buttes Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ MESA VERDE)

43-047-50166	NBU 1022-03H2T Sec 03 T10S R22E 1809 FNL 0662 FEL	
43-047-50167	NBU 1022-03N4T Sec 03 T10S R22E 0467 FSL 2043 FWL	
43-047-50168	NBU 1022-03O3T Sec 03 T10S R22E 0561 FSL 2042 FEL	
43-047-50170	NBU 1022-03L2T Sec 03 T10S R22E 2092 FSL 0607 FWL	
43-047-50171	NBU 1022-03A2T Sec 03 T10S R22E 0478 FNL 0706 FEL	
43-047-50172	NBU 1022-03J1T Sec 03 T10S R22E 2639 FSL 1316 FEL	
43-047-50173	NBU 1022-03P4T Sec 03 T10S R22E 0559 FSL 0659 FEL	

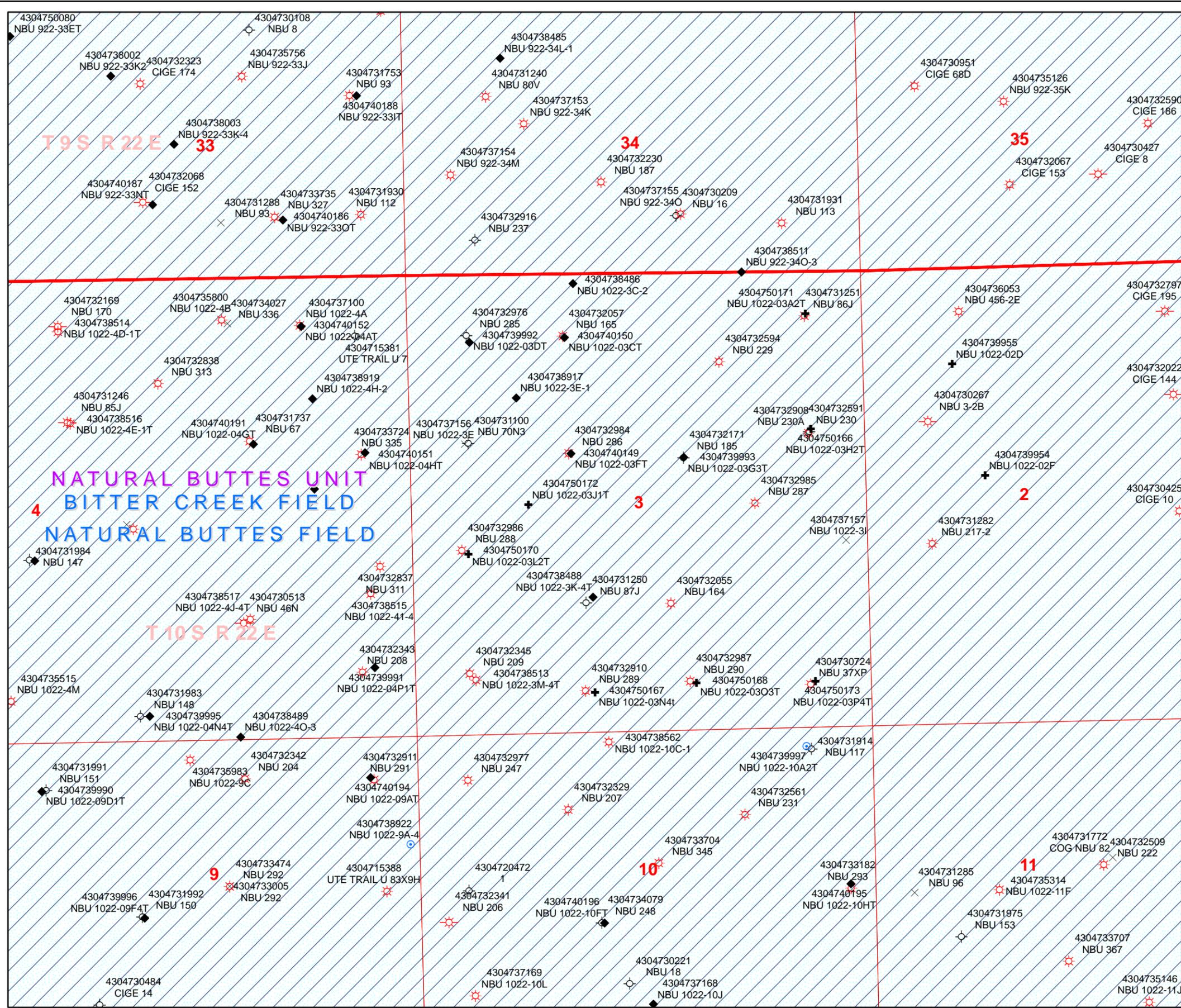
This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

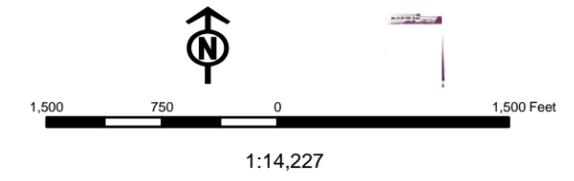
MCoulthard:mc:10-6-08

API Number: 4304750167
Well Name: NBU 1022-03N4t
Township 10.0 S Range 22.0 E Section 3
Meridian: SLBM
 Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.



Map Prepared:
 Map Produced by Diana Mason

Units	Wells Query Events
STATUS	✖ <call other values>
ACTIVE	GIS_STAT_TYPE
EXPLORATORY	◆ <Null>
GAS STORAGE	◆ APD
NF PP OIL	○ DRL
NF SECONDARY	○ GI
PI OIL	○ GS
PP GAS	○ LA
PP GEOTHERM	○ NEW
PP OIL	○ OPS
SECONDARY	○ PA
TERMINATED	○ PGW
Fields	○ POW
STATUS	○ RET
ACTIVE	○ SGW
COMBINED	○ SOW
Sections	○ TA
Township	○ TW
	○ WD
	○ WI
	○ WS
	○ Bottom Hole Location



**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 10/2/2008

API NO. ASSIGNED: 43047501670000

WELL NAME: NBU 1022-03N4t

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)

PHONE NUMBER: 720 929-6666

CONTACT: Raleen White

PROPOSED LOCATION: SESW 3 100S 220E

Permit Tech Review:

SURFACE: 0467 FSL 2043 FWL

Engineering Review:

BOTTOM: 0467 FSL 2043 FWL

Geology Review:

COUNTY: UINTAH

LATITUDE: 39.97194

LONGITUDE: -109.42746

UTM SURF EASTINGS: 634293.00

NORTHINGS: 4425617.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-01191-A

PROPOSED FORMATION: WSMVD

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- PLAT**
- Bond:** FEDERAL - WYB-000291
- Potash**
- Oil Shale 190-5**
- Oil Shale 190-3**
- Oil Shale 190-13**
- Water Permit:** Permit #43-8496
- RDCC Review:**
- Fee Surface Agreement**
- Intent to Commingle**

LOCATION AND SITING:

- R649-2-3.**
Unit: NATURAL BUTTES
 - R649-3-2. General**
 - R649-3-3. Exception**
 - Drilling Unit**
Board Cause No: Cause 173-14
Effective Date: 12/2/1999
Siting: 460' fr u bdry & uncomm. tract
 - R649-3-11. Directional Drill**
-

Comments: Presite Completed

Stipulations: 3 - Commingling - ddoucet
4 - Federal Approval - dmason
17 - Oil Shale 190-5(b) - dmason



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

Permit To Drill

Well Name: NBU 1022-03N4t
API Well Number: 43047501670000
Lease Number: UTU-01191-A
Surface Owner: FEDERAL
Approval Date: 12/23/2008

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P. , P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14 .

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingling:

In accordance with Cause No. 173-14, commingling the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:

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

Conditions of Approval:

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

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Notification Requirements:

Notify the Division with 24 hours of spudding the well.

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

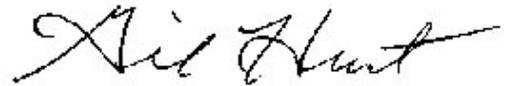
Notify the Division prior to commencing operations to plug and abandon the well.

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

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.

Approved By:

A handwritten signature in black ink, appearing to read "Gil Hunt", with a stylized, cursive script.

Gil Hunt
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-03N4t
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501670000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6587 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0467 FSL 2043 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 3 Township: 10.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 5/21/2009	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

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

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests to change the surface location of this well. The surface location is changing FROM: 467' FSL 2043' FWL TO: 461' FSL 2004' FWL. All other information as originally submitted remains the same. No additional surface disturbance from that amount approved in the original APD is anticipated. If you have any questions, please contact the undersigned. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: May 19, 2009

By:

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 5/18/2009	

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-O3N4T

LOCATED IN UINTAH COUNTY, UTAH

SECTION 3, T10S, R22E, S.L.B.&M.

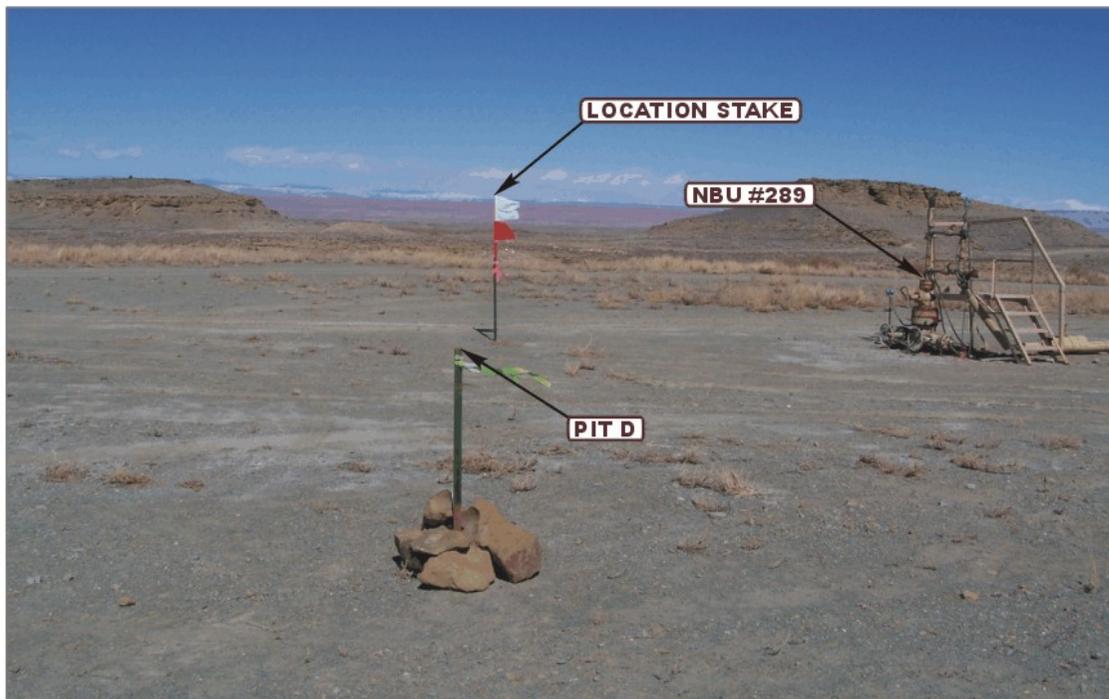


PHOTO: VIEW FROM PIT D TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: EASTERLY



- Since 1964 -

UELS

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

LOCATION PHOTOS

08 18 08
MONTH DAY YEAR

PHOTO

TAKEN BY: D.K.

DRAWN BY: J.J.

REV: 03-09-09 Z.L.

T10S, R22E, S.L.B.&M.

Kerr-McGee Oil & Gas Onshore LP

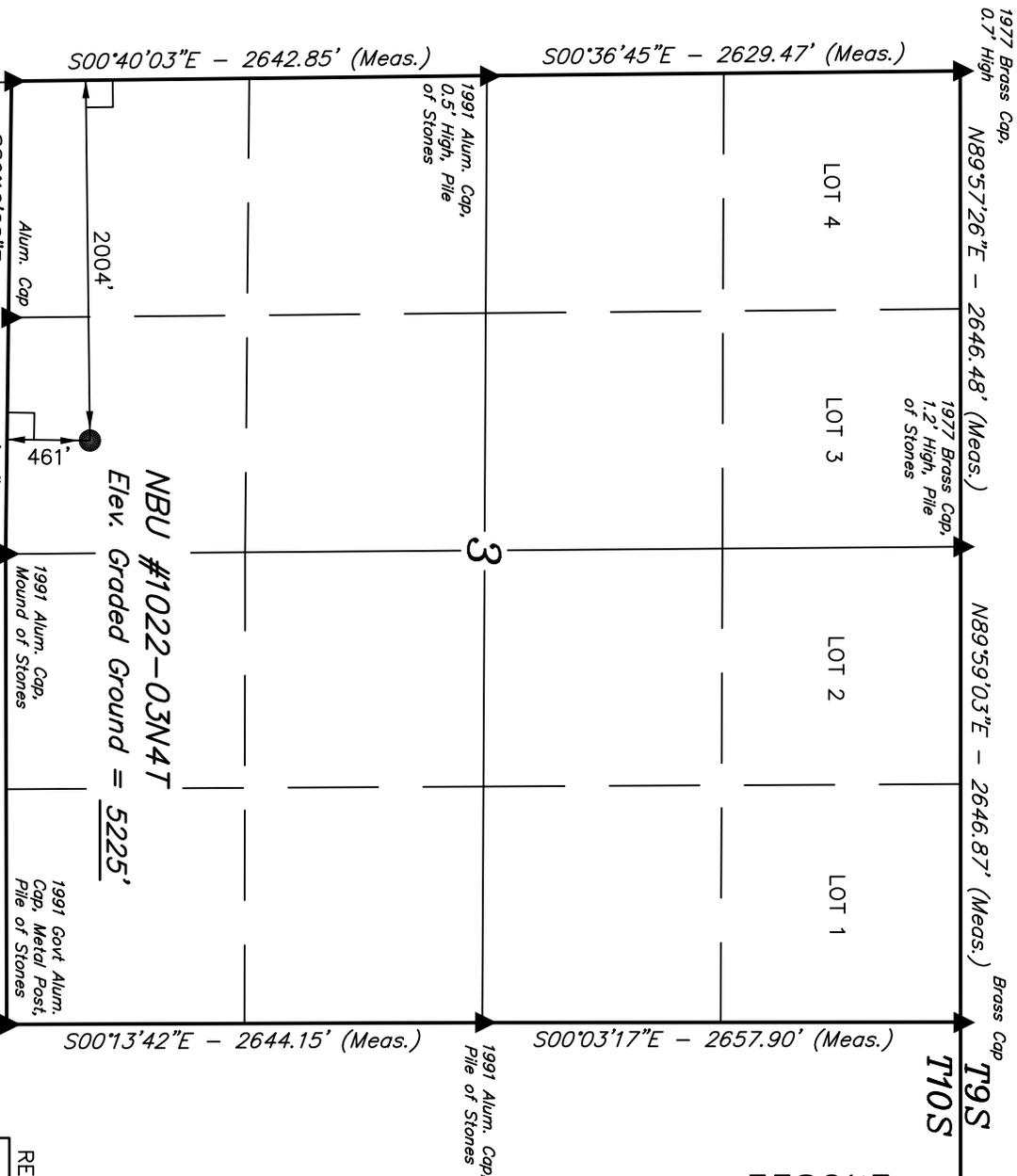
Well location, NBU #1022-03N4T, located as shown in the SE 1/4 SW 1/4 of Section 3, T10S, R22E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

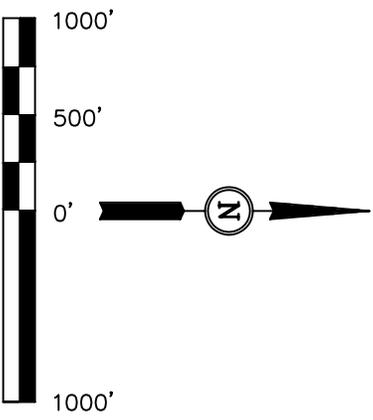
BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

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



NBU #1022-03N4T
Elev. Graded Ground = 5225'



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.

DAVID ROBERTS
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REV 03-09-09 K.E.

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

LEGEND:

- ┌ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(NAD 83)
LATITUDE = 39°58'19.15" (39.971986)
LONGITUDE = 109°25'41.67" (109.428242)
(NAD 27)
LATITUDE = 39°58'19.27" (39.972019)
LONGITUDE = 109°25'39.21" (109.427558)

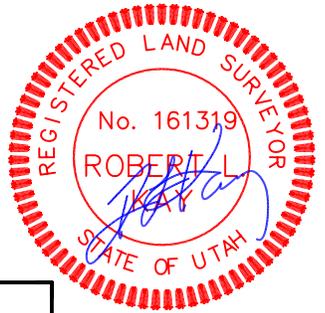
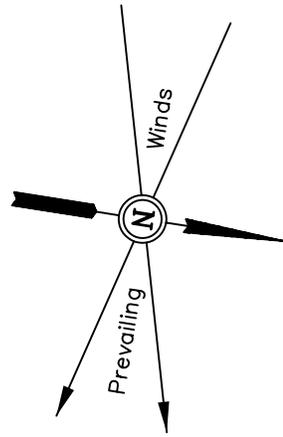
SCALE	1" = 1000'	DATE SURVEYED:	08-06-08	DATE DRAWN:	08-20-08
PARTY	D.K. C.K. S.L.	REFERENCES	G.L.O. PLAT		
WEATHER	WARM	FILE	Kerr-McGee Oil & Gas Onshore LP		

Kerr-McGee Oil & Gas Onshore LP

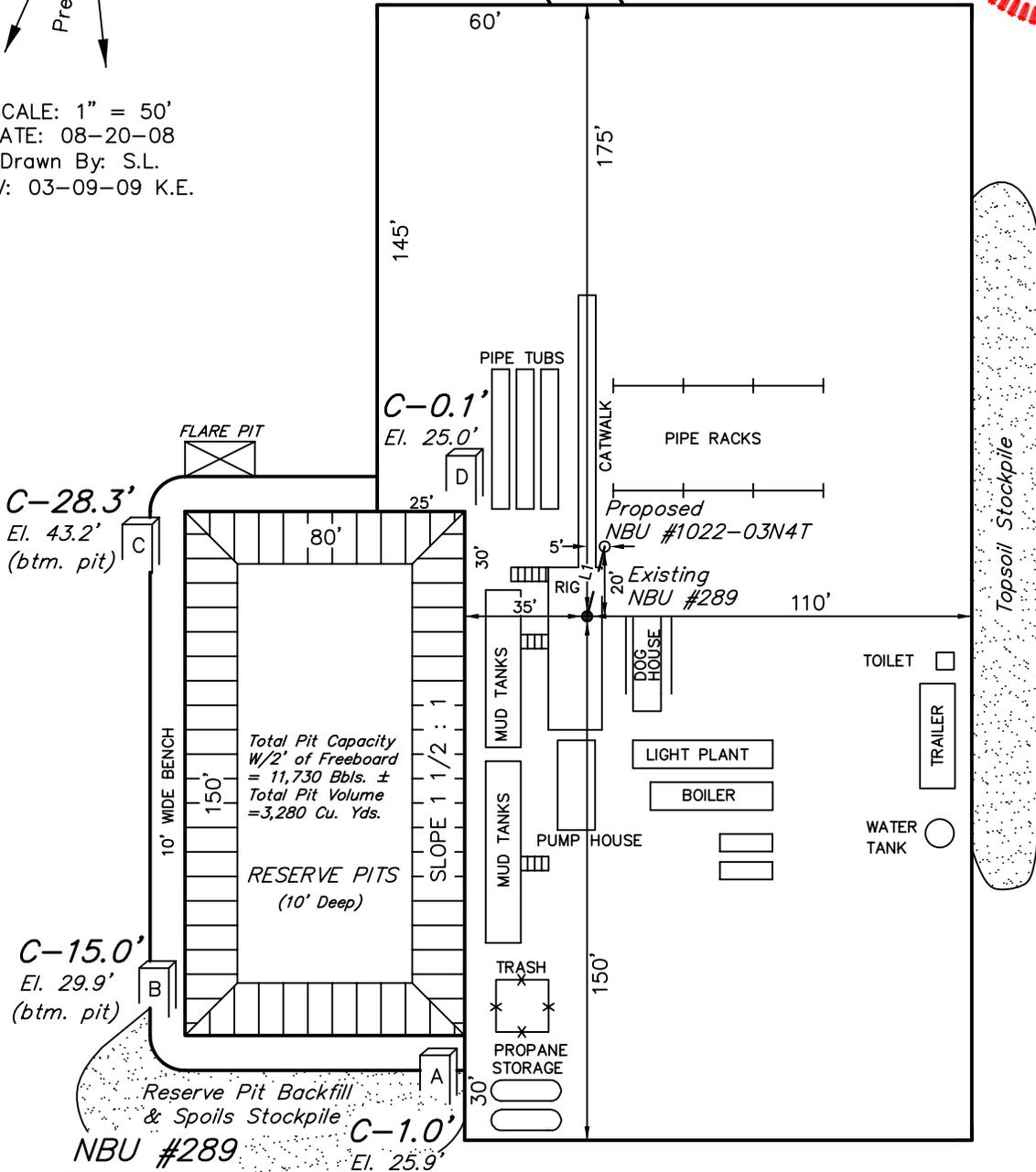
FIGURE #1

LOCATION LAYOUT FOR

NBU #1022-03N4T
SECTION 3, T10S, R22E, S.L.B.&M.
461' FSL 2004' FWL



SCALE: 1" = 50'
DATE: 08-20-08
Drawn By: S.L.
REV: 03-09-09 K.E.



(NAD 83)
LATITUDE = 39°58'19.13" (39.971981)
LONGITUDE = 109°25'41.40" (109.428167)
(NAD 27)
LATITUDE = 39°58'19.25" (39.972014)
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AZIMUTH TABLE		
LINE	BEARING	LENGTH
L1	275.793333 Az.	20.61'

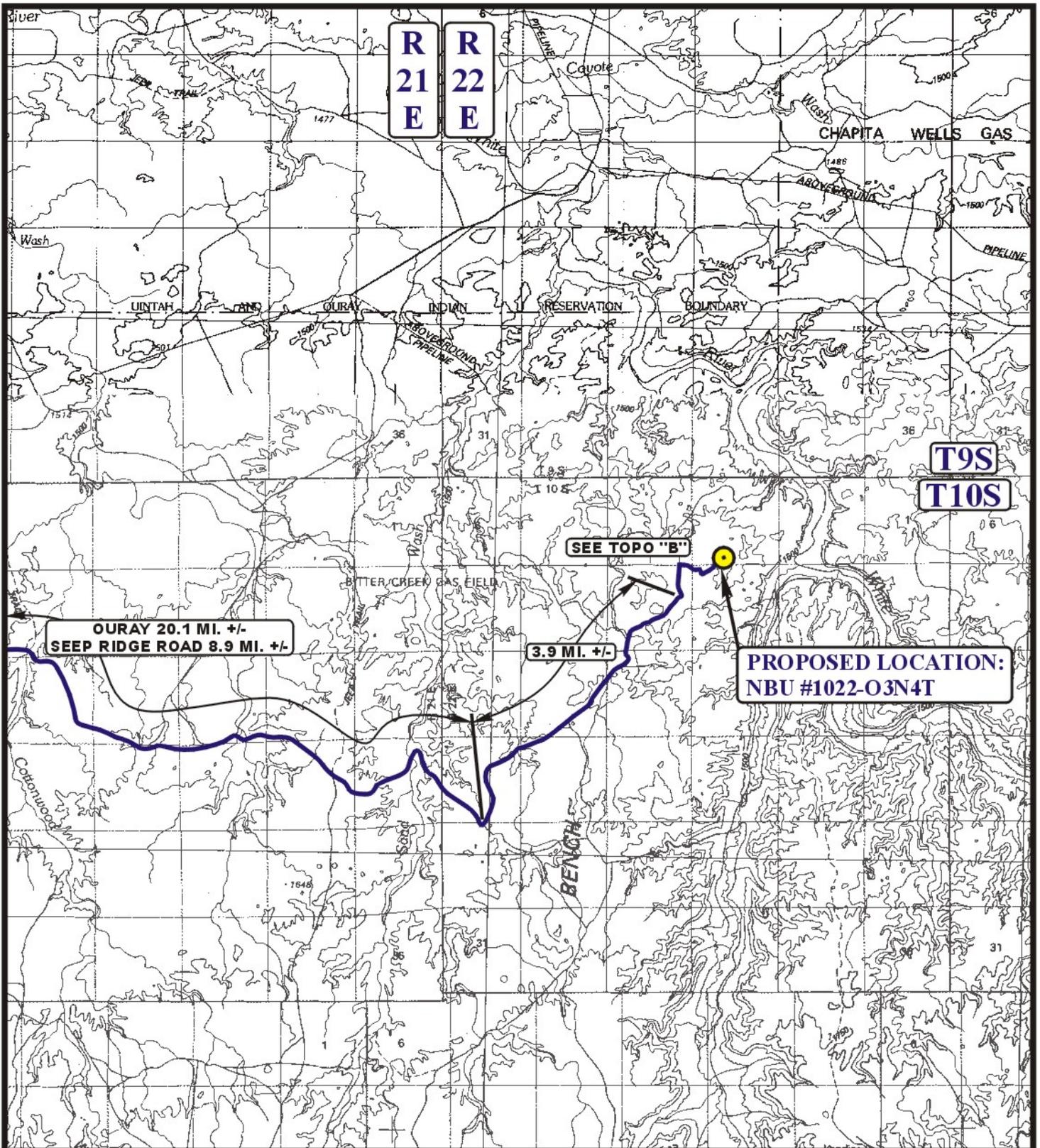
NOTES:

FINISHED GRADE ELEV. AT LOC. STAKE = 5224.9'

Kerr-McGee Oil & Gas Onshore LP
NBU #1022-O3N4T
SECTION 3, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 8.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN AN NORTHEASTERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE EXISTING WELL #289 AND THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 55.9 MILES.



LEGEND:

 PROPOSED LOCATION



Kerr-McGee Oil & Gas Onshore LP

NBU #1022-03N4T

SECTION 3, T10S, R22E, S.L.B.&M.

461' FSL 2004' FWL



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

TOPOGRAPHIC
MAP

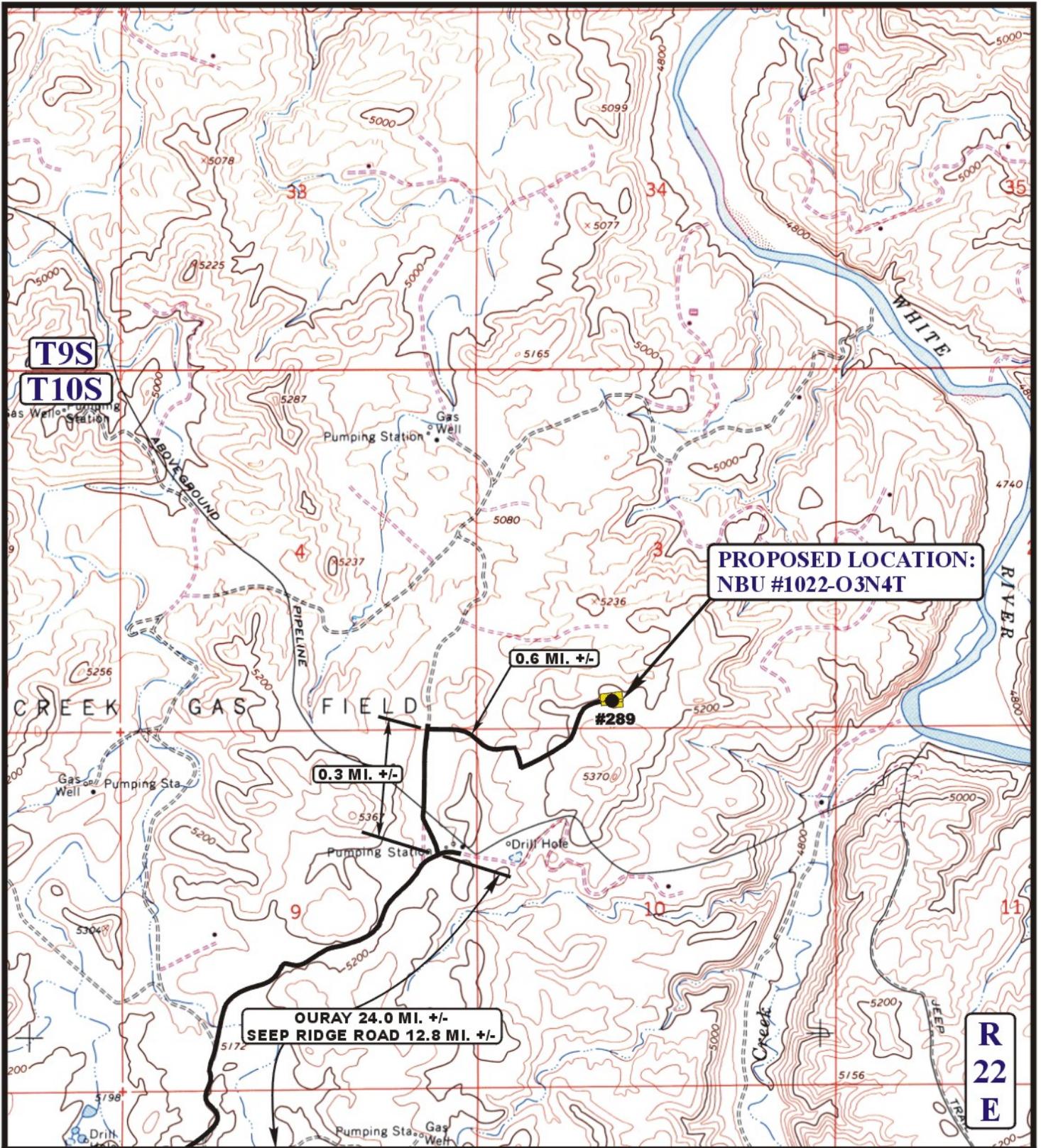
08 18 08
 MONTH DAY YEAR

SCALE: 1:100,000

DRAWN BY: J.J.

REV: 03-09-09 Z.L.





LEGEND:

————— EXISTING ROAD



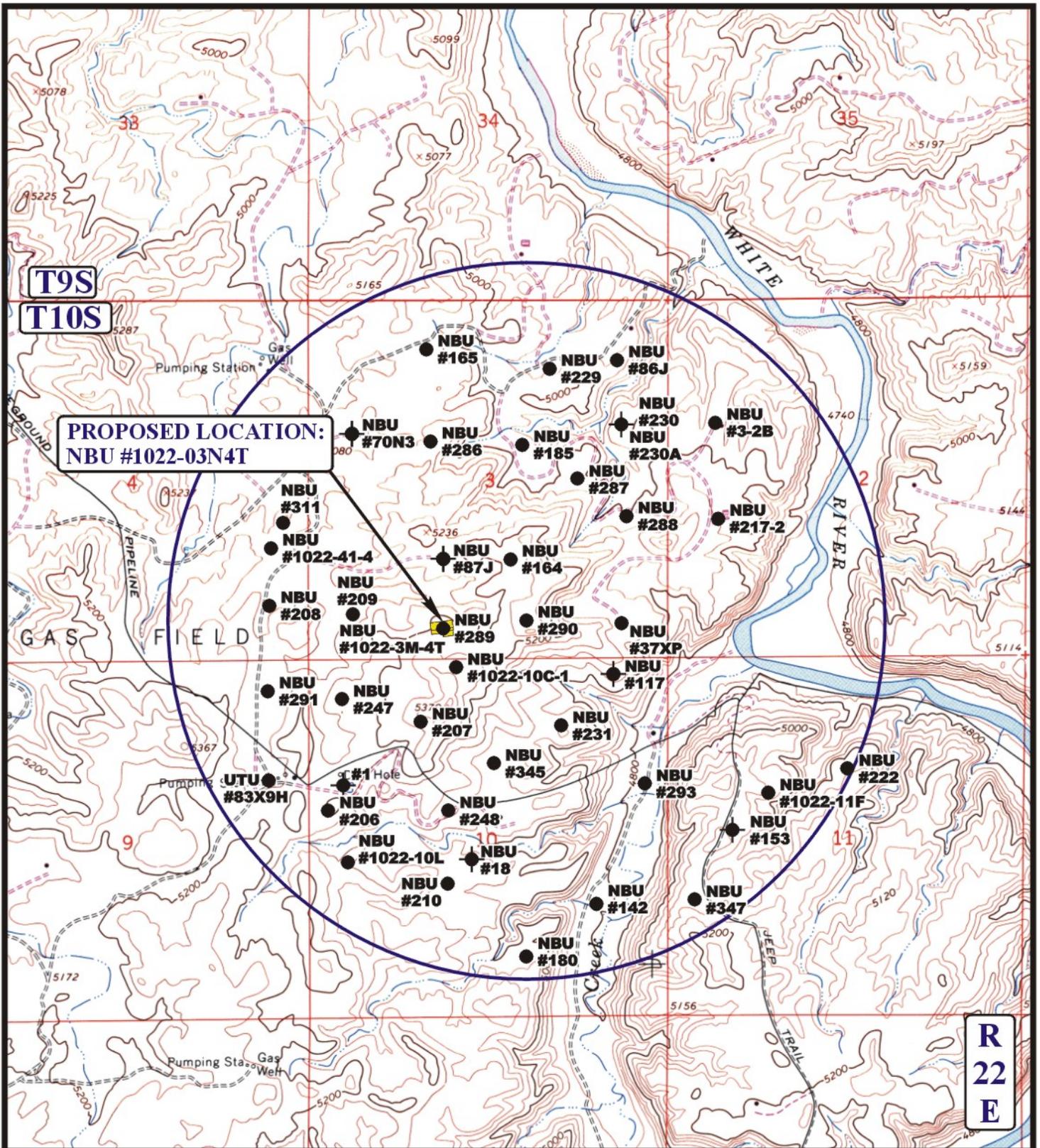
Kerr-McGee Oil & Gas Onshore LP

NBU #1022-03N4T
SECTION 3, T10S, R22E, S.L.B.&M.
461' FSL 2004' FWL

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

TOPOGRAPHIC MAP **08 18 08**
 MONTH DAY YEAR
 SCALE: 1" = 2000' DRAWN BY: J.J. REV: 03-09-09 Z.L.

B
TOPO



**PROPOSED LOCATION:
NBU #1022-03N4T**

LEGEND:

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

Kerr-McGee Oil & Gas Onshore LP

**NBU #1022-03N4T
SECTION 3, T10S, R22E, S.L.B.&M.
461' FSL 2004' FWL**

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



TOPOGRAPHIC MAP 08 18 08
MONTH DAY YEAR
SCALE: 1" = 2000' DRAWN BY: J.J. REV: 03-09-09 Z.L. **TOPO**

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-03N4t
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501670000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0461 FSL 2004 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 3 Township: 10.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 12/22/2009	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: December 23, 2009

By:

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 12/17/2009	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501670000

API: 43047501670000

Well Name: NBU 1022-03N4t

Location: 0461 FSL 2004 FWL QTR SESW SEC 3 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 12/23/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No

- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No

- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No

- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No

- Has the approved source of water for drilling changed? Yes No

- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No

- Is bonding still in place, which covers this proposed well? Yes No

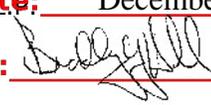
**Approved by the
Utah Division of
Oil, Gas and Mining**

Signature: Danielle Piernot

Date: 12/17/2009

Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: December 23, 2009

By: 

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
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2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501670000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6587 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0467 FSL 2043 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 3 Township: 10.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 5/21/2009	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
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	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

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

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests to change the surface location of this well. The surface location is changing FROM: 467' FSL 2043' FWL TO: 461' FSL 2004' FWL. All other information as originally submitted remains the same. No additional surface disturbance from that amount approved in the original APD is anticipated. If you have any questions, please contact the undersigned. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: May 19, 2009

By:

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 5/18/2009	

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-O3N4T

LOCATED IN UINTAH COUNTY, UTAH

SECTION 3, T10S, R22E, S.L.B.&M.

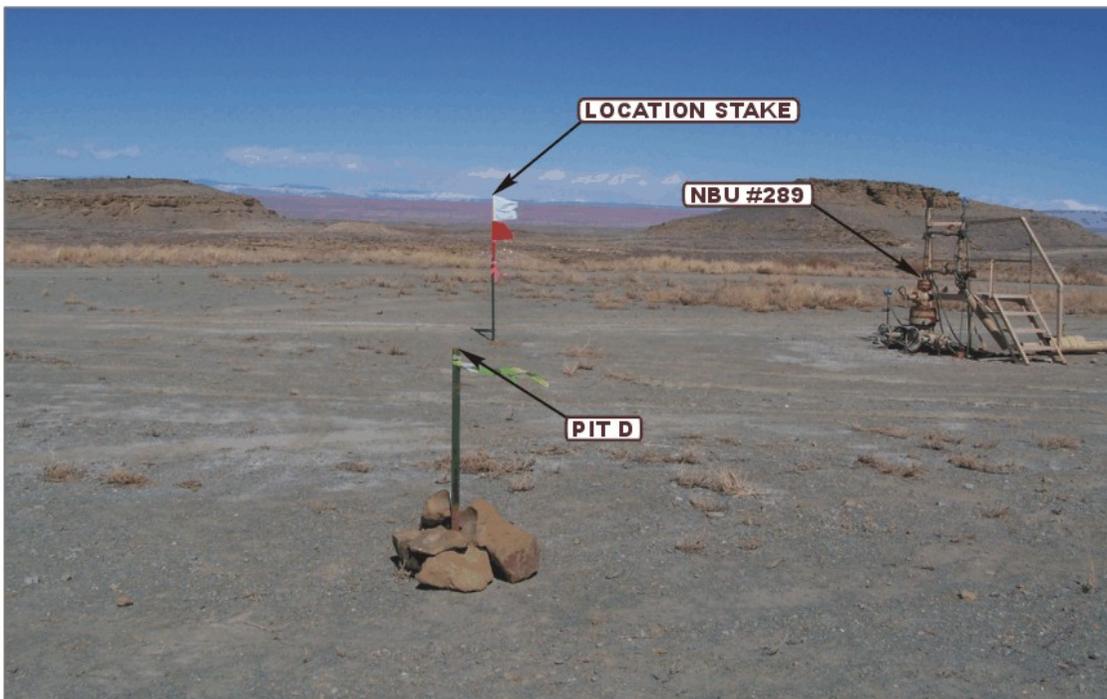


PHOTO: VIEW FROM PIT D TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: EASTERLY



- Since 1964 -

UELS

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

LOCATION PHOTOS

08 18 08
MONTH DAY YEAR

PHOTO

TAKEN BY: D.K.

DRAWN BY: J.J.

REV: 03-09-09 Z.L.

T10S, R22E, S.L.B.&M.

Kerr-McGee Oil & Gas Onshore LP

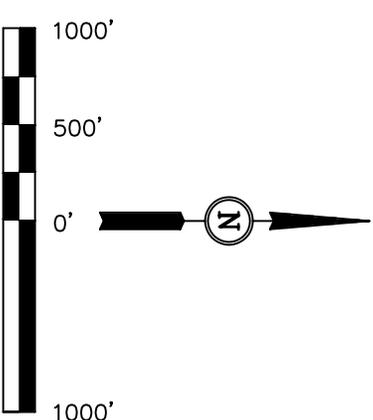
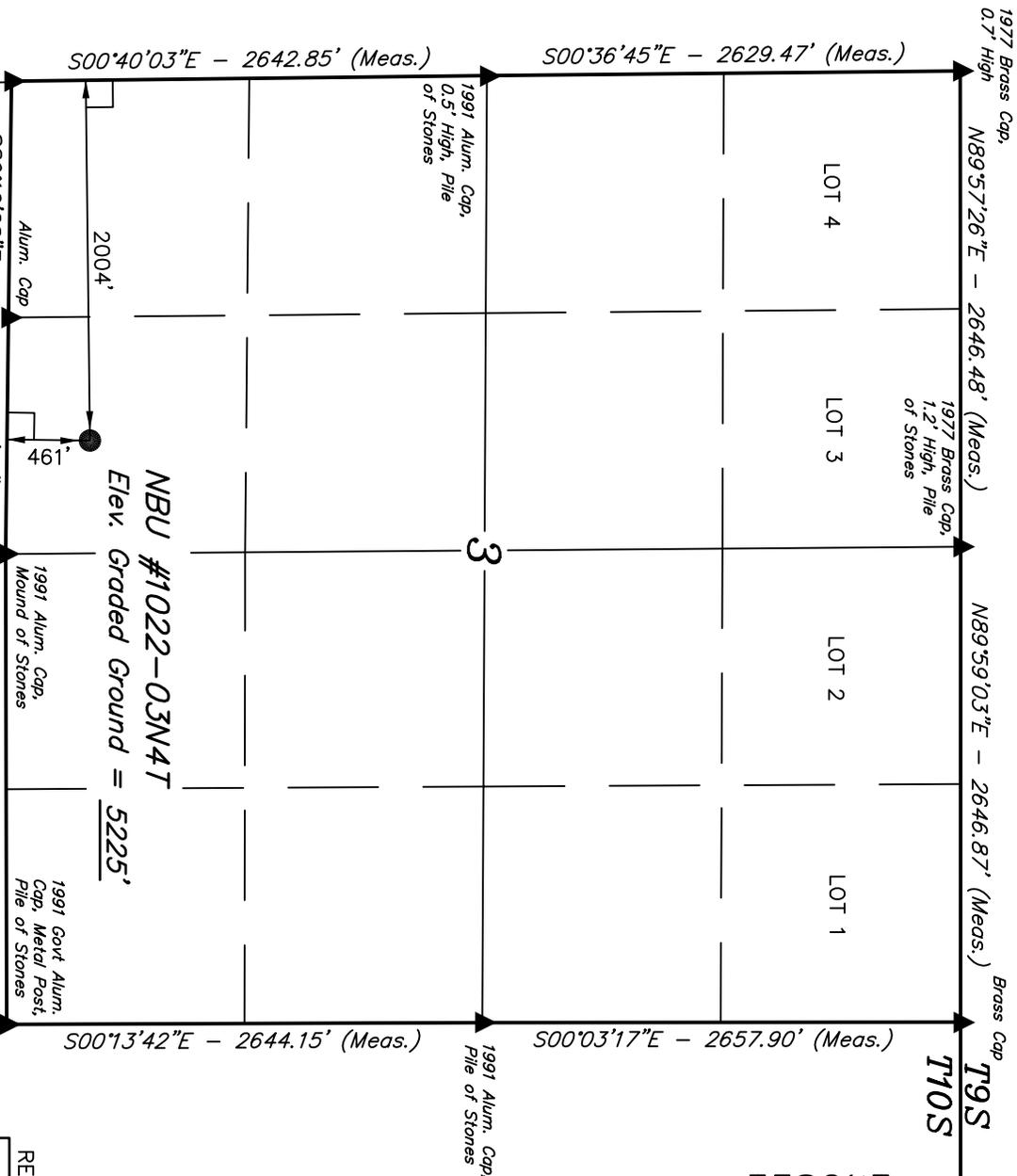
Well location, NBU #1022-03N4T, located as shown in the SE 1/4 SW 1/4 of Section 3, T10S, R22E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

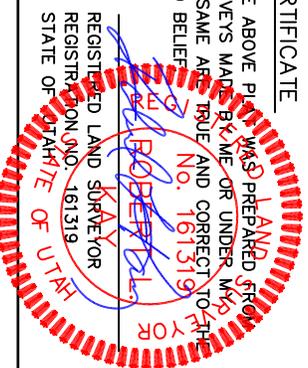
BASIS OF BEARINGS

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



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.



REV 03-09-09 K.E.

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

SCALE	1" = 1000'	DATE SURVEYED:	08-06-08	DATE DRAWN:	08-20-08
PARTY	D.K. C.K. S.L.	REFERENCES	G.L.O. PLAT		
WEATHER	WARM	FILE	Kerr-McGee Oil & Gas Onshore LP		

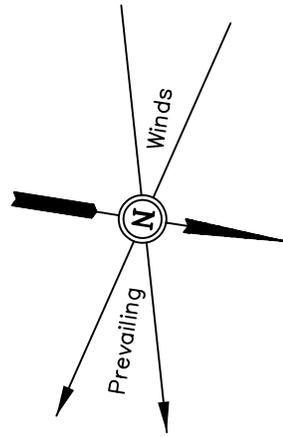
LEGEND:
 ┌ = 90° SYMBOL
 ● = PROPOSED WELL HEAD.
 ▲ = SECTION CORNERS LOCATED.

(NAD 83)
 LATITUDE = 39°58'19.15" (39.971986)
 LONGITUDE = 109°25'41.67" (109.428242)
 (NAD 27)
 LATITUDE = 39°58'19.27" (39.972019)
 LONGITUDE = 109°25'39.21" (109.427558)

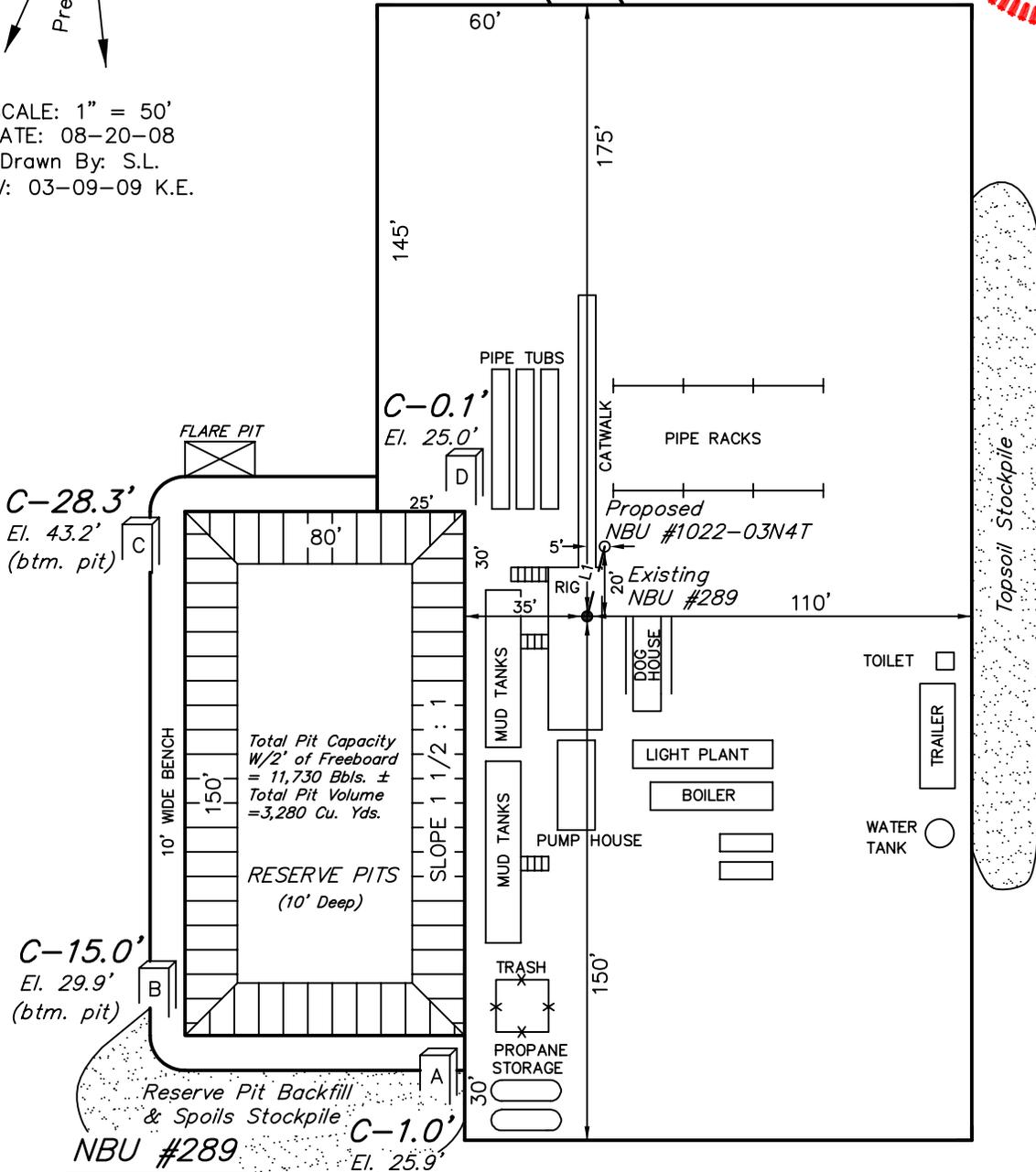
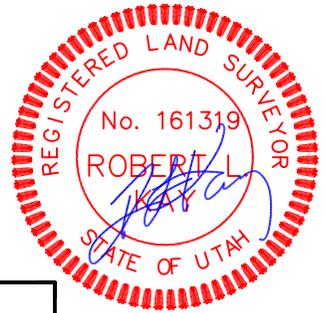
Kerr-McGee Oil & Gas Onshore LP

FIGURE #1

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 NBU #1022-03N4T
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 461' FSL 2004' FWL



SCALE: 1" = 50'
 DATE: 08-20-08
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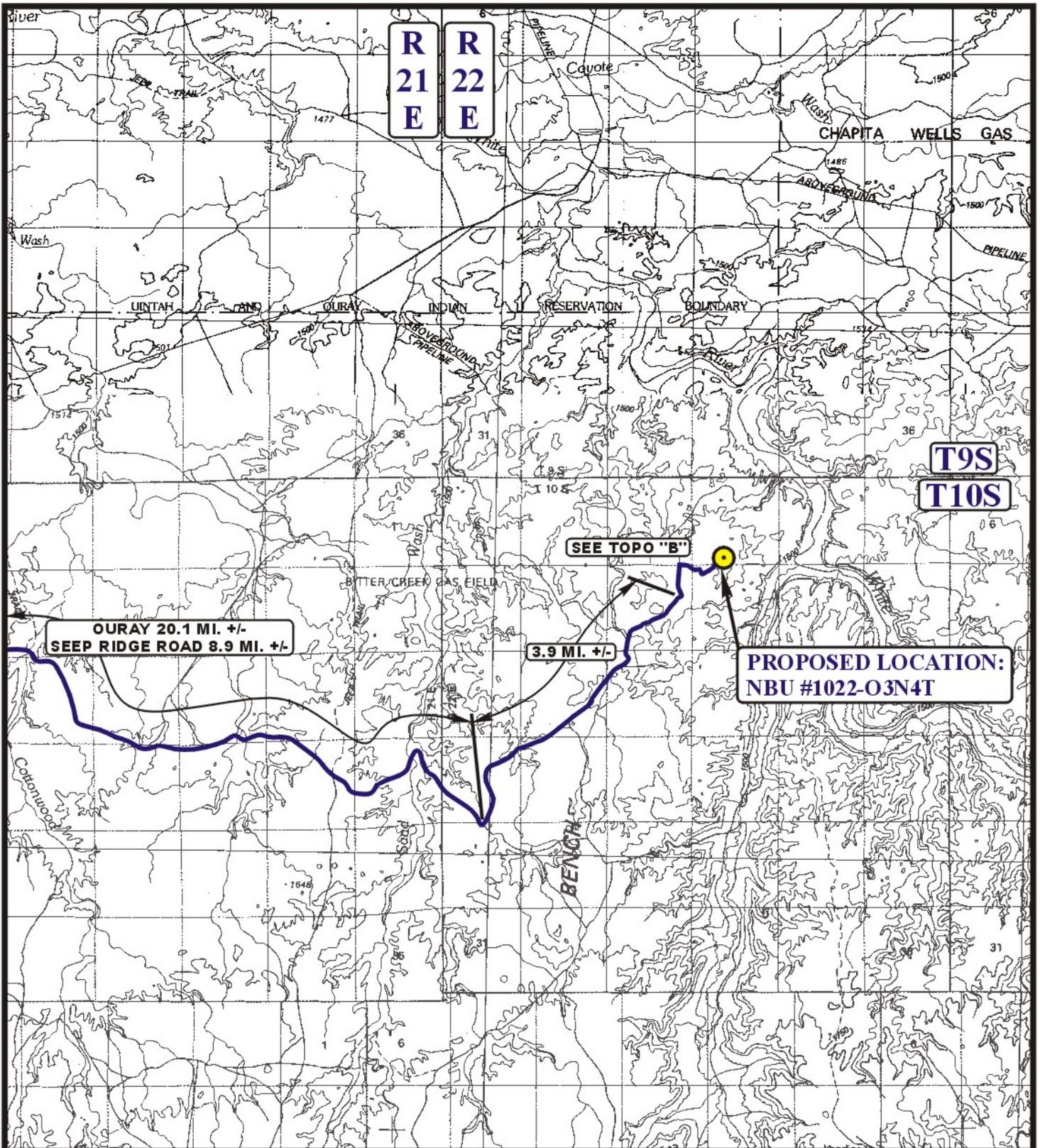
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TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 55.9 MILES.



LEGEND:

 PROPOSED LOCATION



Kerr-McGee Oil & Gas Onshore LP

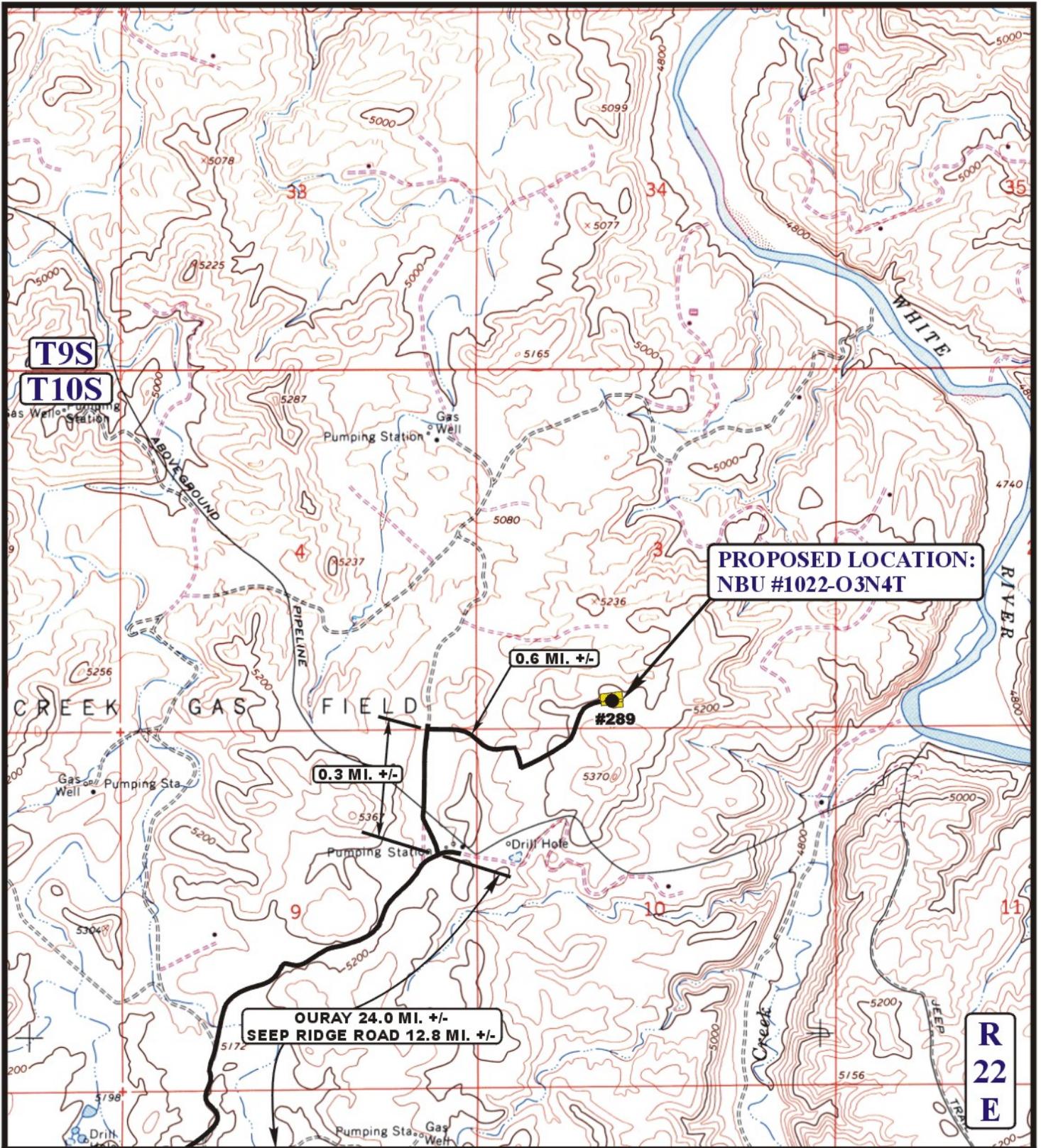
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Utah Engineering & Land Surveying
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TOPOGRAPHIC **08 18 08**
MAP MONTH DAY YEAR
 SCALE: 1:100,000 DRAWN BY: J.J. REV: 03-09-09 Z.L.





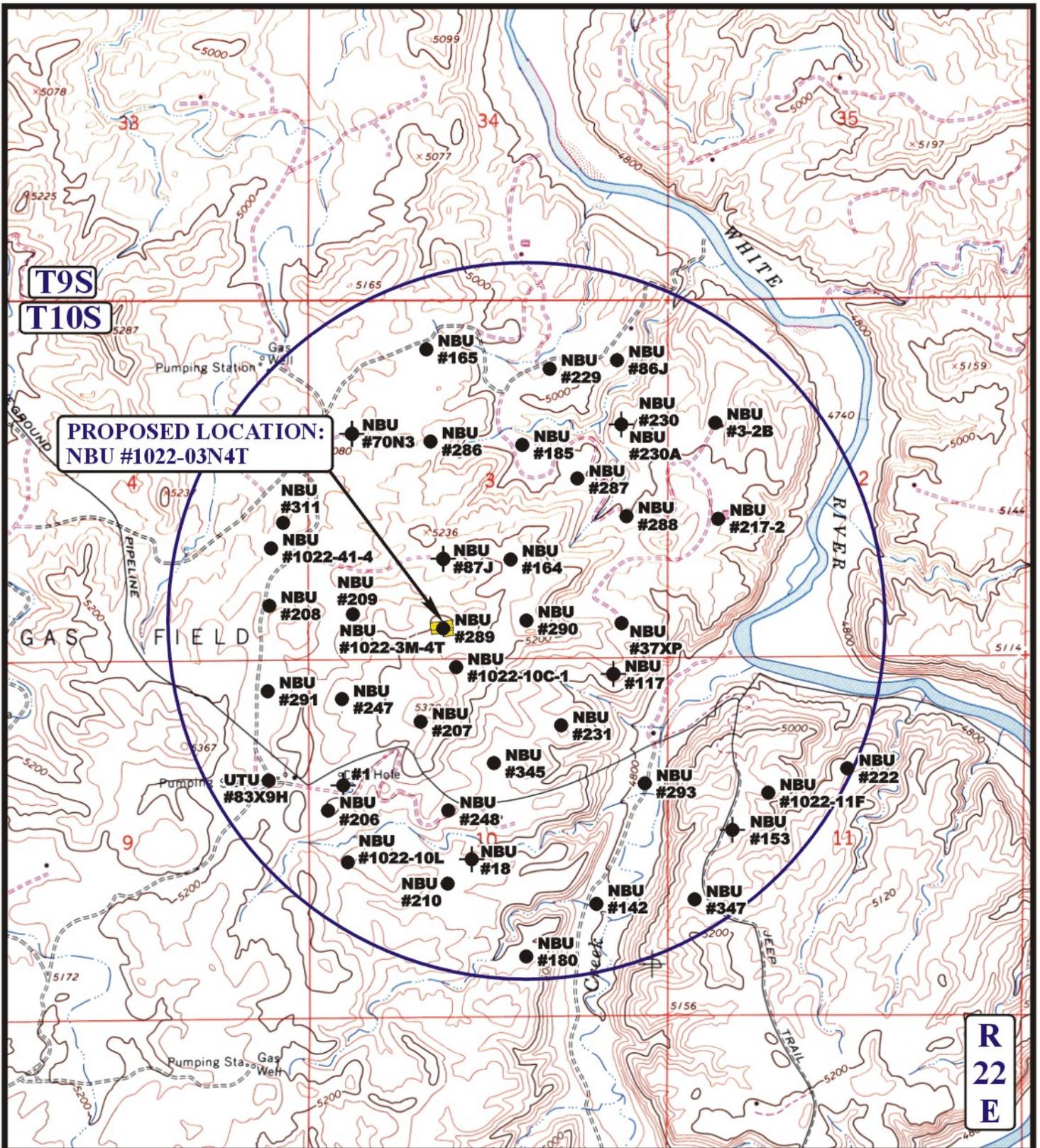
LEGEND:

————— EXISTING ROAD

N

Kerr-McGee Oil & Gas Onshore LP
NBU #1022-03N4T
 SECTION 3, T10S, R22E, S.L.B.&M.
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	Utah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 (435) 789-1017 * FAX (435) 789-1813	TOPOGRAPHIC MAP	08 18 08 <small>MONTH DAY YEAR</small>	
	<small>SCALE: 1" = 2000'</small>	<small>DRAWN BY: J.J.</small>	<small>REV: 03-09-09 Z.L.</small>	



**PROPOSED LOCATION:
NBU #1022-03N4T**

LEGEND:

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



Kerr-McGee Oil & Gas Onshore LP

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TOPOGRAPHIC MAP 08 18 08
MONTH DAY YEAR
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11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 12/23/2010 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

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

Date: 12/23/2010
 By: 

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 12/20/2010



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501670000

API: 43047501670000

Well Name: NBU 1022-03N4t

Location: 0461 FSL 2004 FWL QTR SESW SEC 03 TWP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 12/23/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
- Has the approved source of water for drilling changed? Yes No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
- Is bonding still in place, which covers this proposed well? Yes No

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

Signature: Danielle Piernot

Date: 12/20/2010

Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE,

Date: 12/23/2010
By:

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-03N4t
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501670000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6515 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0461 FSL 2004 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 03 Township: 10.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 12/23/2011	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: 01/03/2012

By:

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 12/21/2011	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501670000

API: 43047501670000

Well Name: NBU 1022-03N4t

Location: 0461 FSL 2004 FWL QTR SESW SEC 03 TWP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 12/23/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No

- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No

- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No

- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No

- Has the approved source of water for drilling changed? Yes No

- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No

- Is bonding still in place, which covers this proposed well? Yes No

Signature: Danielle Piernot

Date: 12/21/2011

Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-3N4BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501670000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6514
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1498 FSL 1998 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 03 Township: 10.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 6/1/2012 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 50px;" type="text"/>

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

The operator is requesting the approval of the following changes to the originally approved APD: 1. Change the Well Name = from NBU 1022-03N4T to NBU 1022-3N4BS / 2. Surface & Bottom Hole Location Change (New Plat is Attached) / a. From = 461 FSL/ 2004 FWL To = 1498 FSL/ 1998 FWL / 3. Proposed Total Depth (New Drilling Program Attached) / 4. Surface Hole Size and Casing Grade (New Wellbore Diagram Attached) / 5. Change to a Directional Well (Directional Drilling Survey Attached) / 6. Surface Use Plan of Operation (Updated Plan Attached)

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

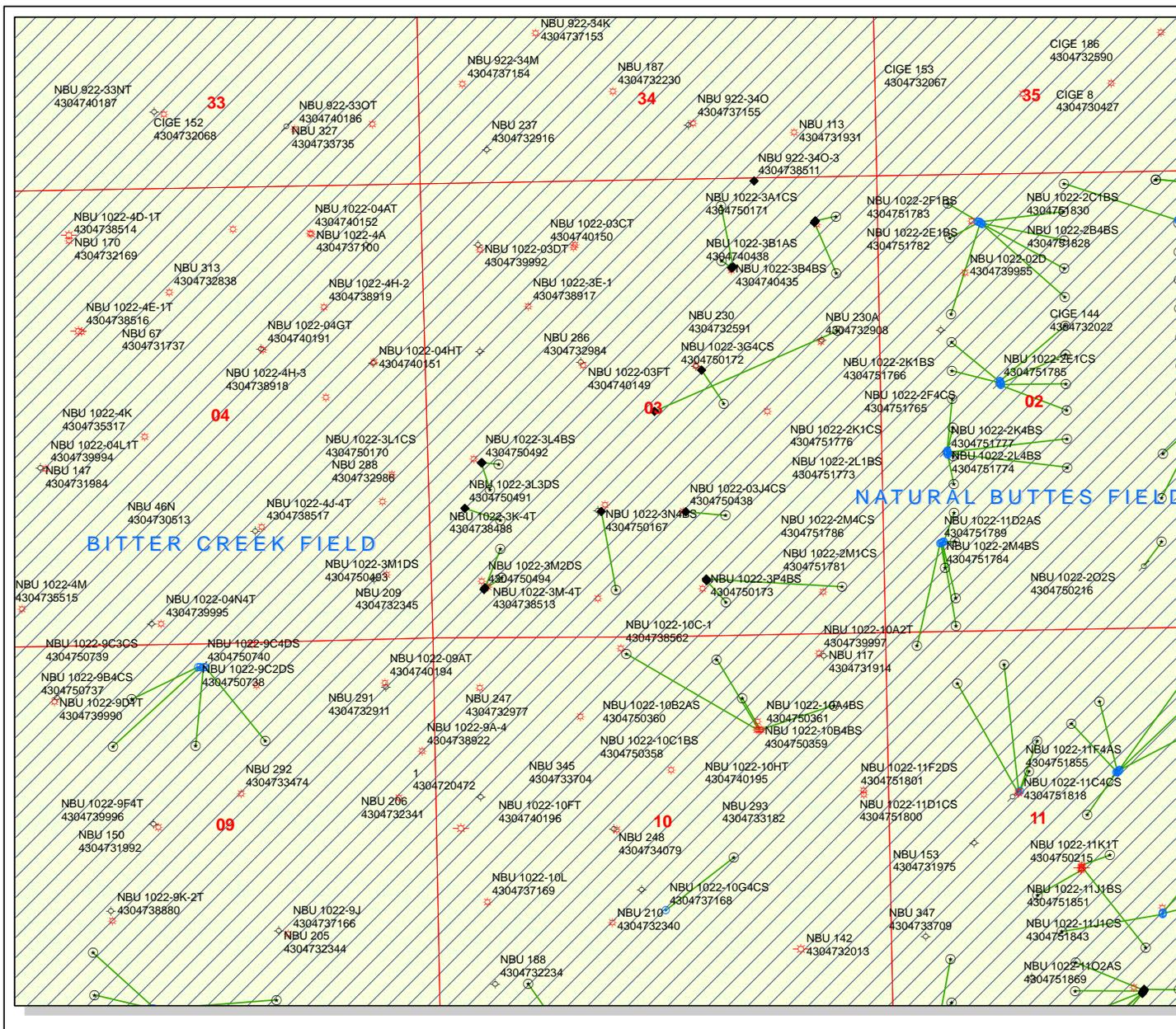
Date: June 04, 2012

By:

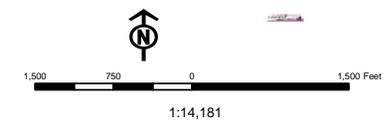
NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER 720 929-6086	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 5/21/2012	

API Number: 4304750167
Well Name: NBU 1022-3N4BS
Township T1.0 Range R2.2 Section 03
Meridian: SLBM
 Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

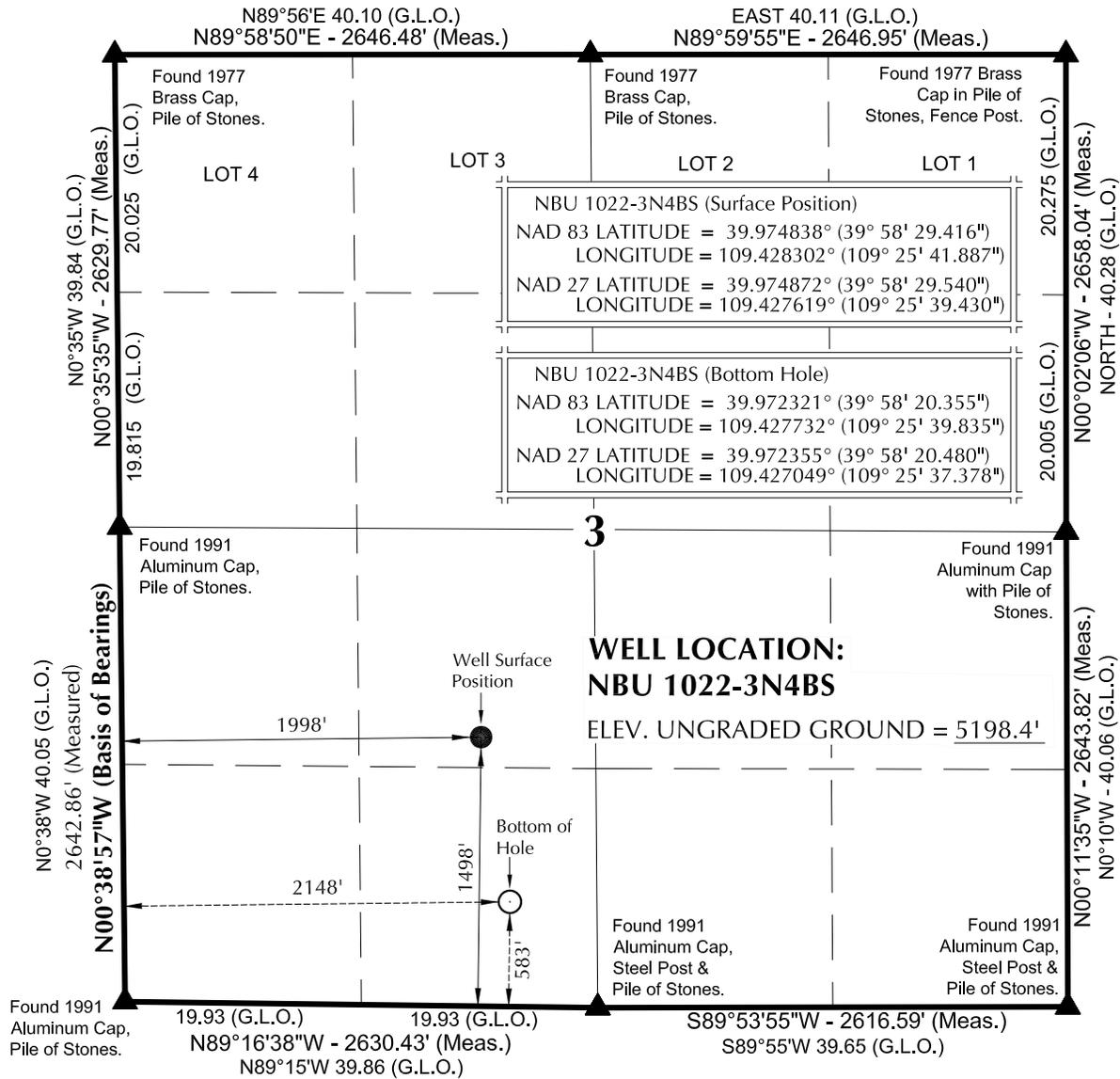
Map Prepared:
 Map Produced by Diana Mason



Units Status	Wells Query Status
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
PI OIL	LA - Location Abandoned
NF SECONDARY	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERM.	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
Unknown	SGW - Shut-in Gas Well
ABANDONED	SOW - Shut-in Oil Well
ACTIVE	TA - Temp. Abandoned
COMBINED	TW - Test Well
INACTIVE	WDW - Water Disposal
STORAGE	WWI - Water Injection Well
TERMINATED	WSW - Water Supply Well

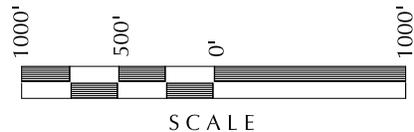


T10S, R22E, S.L.B.&M.



NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains.
1 chain = 66 feet.
- 3. The Bottom of hole bears S09°54'22"E 930.89' from the Surface Position.
- 4. Bearings are based on Global Positioning Satellite observations.
- 5. Basis of elevation is Tri-Sta "Two Water" located in the NW ¼ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.



SURVEYOR'S 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.

11-17-11
 No. 6028691
 JOHN R. LAUGH
 PROFESSIONAL LAND SURVEYOR
 REGISTRATION No. 6028691
 STATE OF UTAH

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street - Denver, Colorado 80202

WELL PAD: NBU 1022-3K

**NBU 1022-3N4BS
 WELL PLAT**

**583' FSL, 2148' FWL (Bottom Hole)
 SE ¼ SW ¼ OF SECTION 3, T10S, R22E,
 S.L.B.&M., UTAH COUNTY, UTAH.**

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

TIMBERLINE (435) 789-1365
 ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 11-2-11	SURVEYED BY: J.W.	SHEET NO: 3
DATE DRAWN: 11-14-11	DRAWN BY: T.J.R.	
SCALE: 1" = 1000'		3 OF 18

**Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 1022-3K
WELLS - NBU 1022-3N1BS, NBU 1022-3N1CS,
NBU 1022-3N4BS, NBU 1022-3N4CS,
NBU 1022-3K4BS & NBU 1022-3K1CS
Section 3, T10S, R22E, S.L.B.&M.**

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 23.8 miles to the intersection of the Bitter Creek Road (County B Road 4120). Exit left and proceed in a southeasterly direction along the Bitter Creek Road approximately 4.0 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along the Class D County Road approximately 4.6 miles to a second Class D County Road to the east. Exit right and proceed in an easterly direction along the second Class D County Road approximately 0.4 miles to the proposed access road to the east. Follow road flags in an easterly direction approximately 130 feet to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 56.3 miles in a southerly direction.

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 1022-3N4BS**

Surface:	1498 FSL / 1998 FWL	NESW
BHL:	583 FSL / 2148 FWL	SESW

Section 3 T10S R22E

Unitah County, Utah
Mineral Lease: UTU-01191

ONSHORE ORDER NO. 1**DRILLING PROGRAM**

1. & 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1,270'	
Birds Nest	1,487'	Water
Mahogany	1,994'	Water
Wasatch	4,324'	Gas
Mesaverde	6,642'	Gas
Sego	8,802'	Gas
Castlegate	8,975'	Gas
Blackhawk	9,400'	Gas
TVD	10,000'	
TD	10,144'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

2/15/2012

RECEIVED: May. 21, 2012

7. Abnormal Conditions:

Maximum anticipated bottom hole pressure calculated at 10000' TVD, approximately equals
6,600 psi (0.66 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,446 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may

be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

2/15/2012

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

2/15/2012

RECEIVED: May. 21, 2012

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. **Other Information:**

Please refer to the attached Drilling Program.

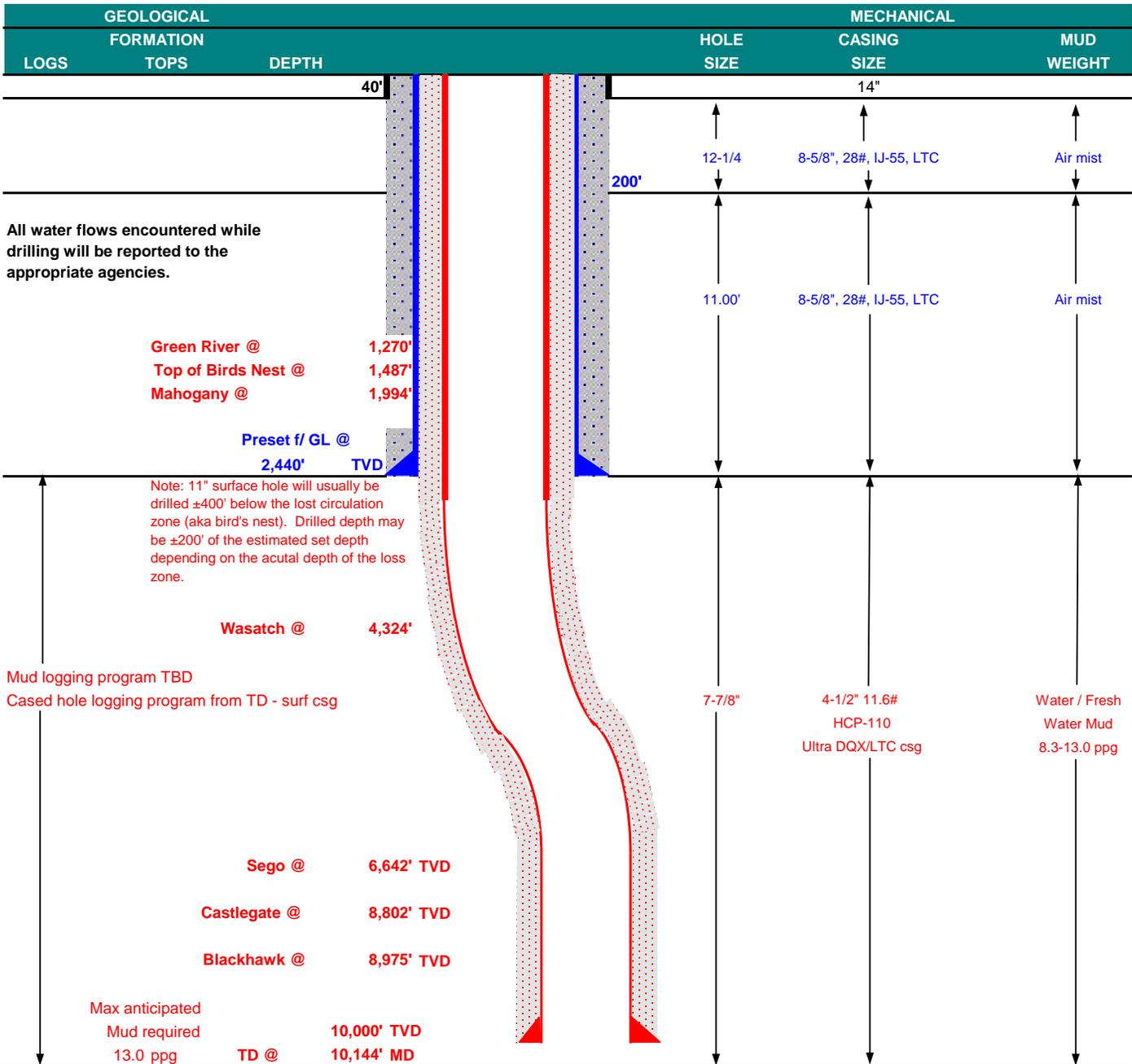
2/15/2012

RECEIVED: May. 21, 2012



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	February 15, 2012			
WELL NAME	NBU 1022-3N4BS		TD	10,000'	TVD	10,144' MD	
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	5198.4
SURFACE LOCATION	NESW	1498 FSL	1998 FWL	Sec 3	T 10S R 22E		
	Latitude: 39.974838		Longitude: -109.428302		NAD 83		
BTM HOLE LOCATION	SESW	583 FSL	2148 FWL	Sec 3	T 10S R 22E		
	Latitude: 39.972321		Longitude: -109.427732		NAD 83		
OBJECTIVE ZONE(S)	BLACKHAWK (Part of the Mesaverde Group)						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.						





KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

							DESIGN FACTORS			
	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	LTC	DQX
		TENSION								
CONDUCTOR	14"	0-40'								
							3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to 2,440	28.00	IJ-55	LTC	2.21	1.65	5.82	N/A
							10,690	8,650	279,000	367,174
PRODUCTION	4-1/2"	0	to 5,000	11.60	HCP-110	DQX	1.19	1.28		3.89
	4-1/2"	5,000	to 10,144'	11.60	HCP-110	LTC	1.19	1.28	5.83	

Surface casing:

(Burst Assumptions: TD = 13.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.66 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
Option 1							
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
SURFACE			NOTE: If well will circulate water to surface, option 2 will be utilized				
Option 2	LEAD	1,940'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	180	35%	11.00	3.82
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	3,824'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	300	35%	12.00	3.38
	TAIL	6,320'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,490	35%	14.30	1.31

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

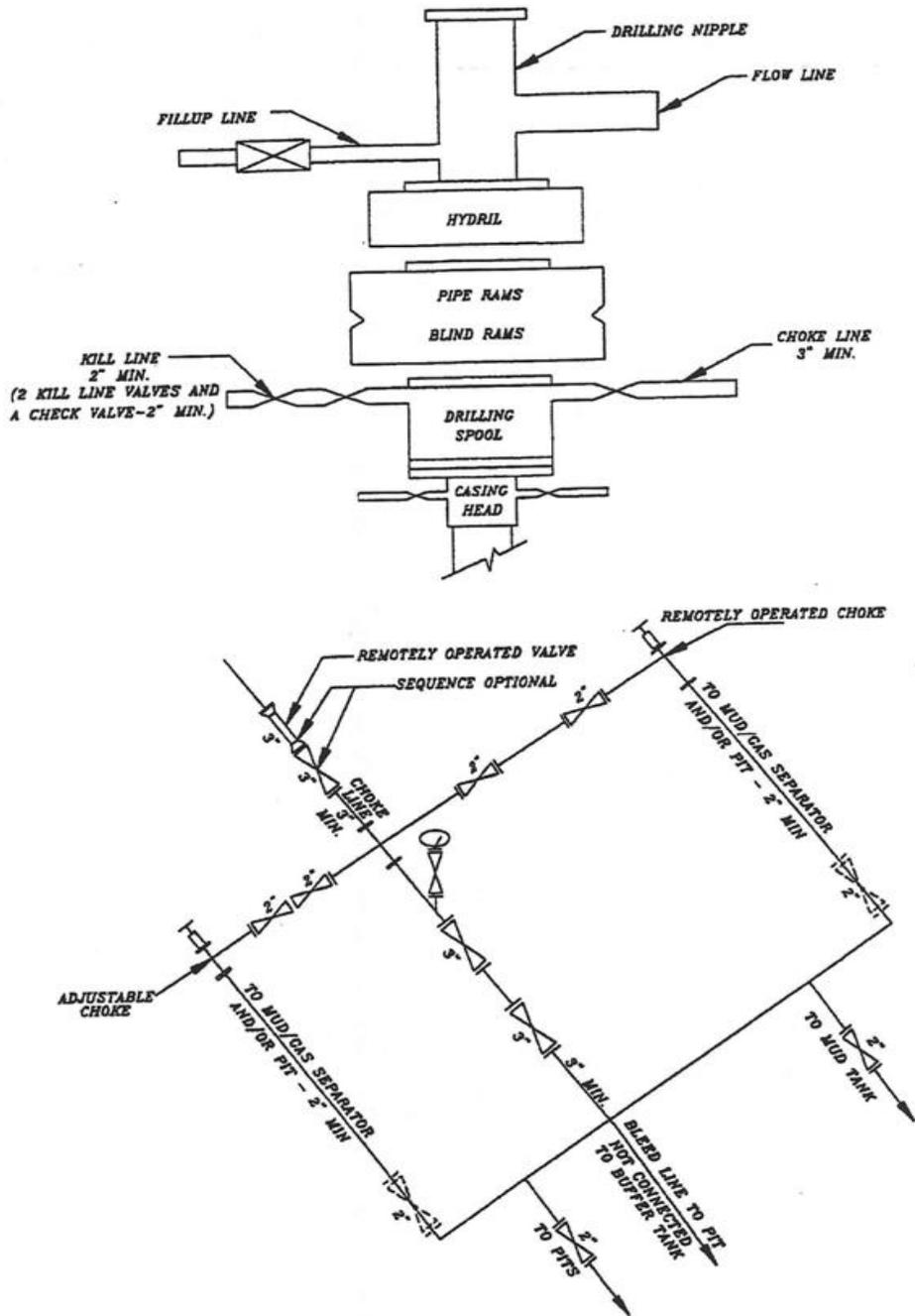
DRILLING ENGINEER: _____
Nick Spence / Danny Showers / Chad Loesel

DATE: _____

DRILLING SUPERINTENDENT: _____
Kenny Gathings / Lovel Young

DATE: _____

EXHIBIT A NBU 1022-3N4BS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK



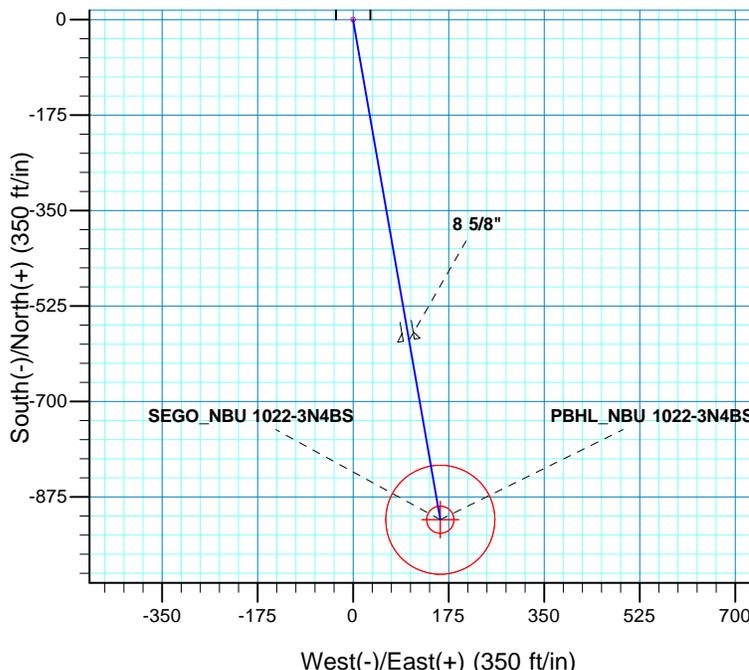
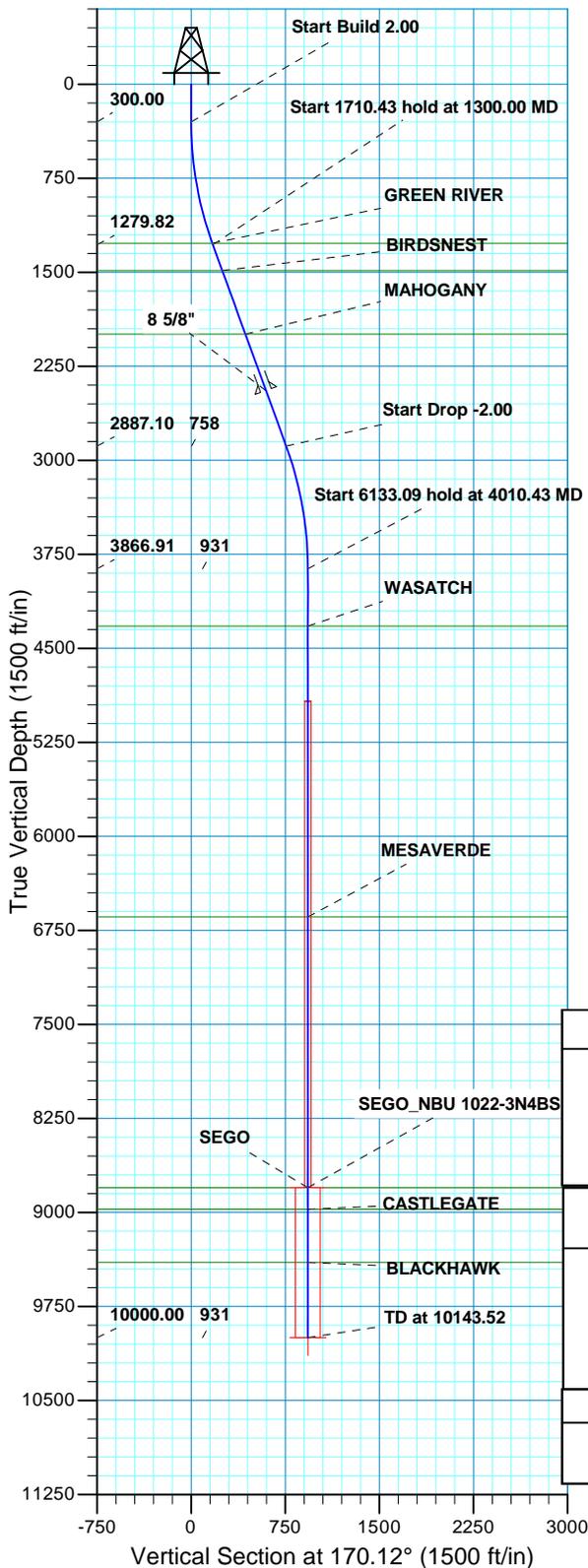
Site: NBU 1022-3K PAD
Well: NBU 1022-3N4BS
Wellbore: OH
Design: PLAN #1



WELL DETAILS: NBU 1022-3N4BS									
GL 5198 & KB 4 @ 5202.00ft (ASSUMED)									
	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude			
	0.00	0.00	14520778.45	2080946.16	39.974872	-109.427619			
DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
SEGO	8802.00	-916.73	159.73	14519864.68	2081122.03	39.972355	-109.427049	Circle (Radius: 25.00)	
- plan hits target center									
PBHL	10000.00	-916.73	159.73	14519864.68	2081122.03	39.972355	-109.427049	Circle (Radius: 100.00)	
- plan hits target center									

Azimuths to True North
Magnetic North: 10.96°

Magnetic Field
Strength: 52258.8snT
Dip Angle: 65.84°
Date: 02/08/2012
Model: IGRF2010



SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00		
1300.00	20.00	170.12	1279.82	-170.20	29.66	2.00	170.12	172.77		
3010.43	20.00	170.12	2887.10	-746.52	130.08	0.00	0.00	757.77		
4010.43	0.00	0.00	3866.91	-916.73	159.73	2.00	180.00	930.54		
10143.52	0.00	0.00	10000.00	-916.73	159.73	0.00	0.00	930.54	PBHL_NBU 1022-3N4BS	

PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N			FORMATION TOP DETAILS		
Geodetic System:	Universal Transverse Mercator (US Survey Feet)		TVDPath	MDPath	Formation
Datum:	NAD 1927 (NADCON CONUS)		1487.00	1520.48	GREEN RIVER
Ellipsoid:	Clarke 1866		1994.00	2060.02	BIRDSNEST
Zone:	Zone 12N (114 W to 108 W)		4324.00	4467.52	MAHOGANY
Location:	SECTION 3 T10S R22E		6642.00	6785.52	WASATCH
System Datum:	Mean Sea Level		8802.00	8945.52	MESAVERDE
			8975.00	9118.52	SEGO
			9400.00	9543.52	CASTLEGATE
					BLACKHAWK

CASING DETAILS				
TVD	MD	Name	Size	
2444.00	2538.90	8 5/8"	8.625	



US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

NBU 1022-3K PAD

NBU 1022-3N4BS

OH

Plan: PLAN #1

Standard Planning Report

08 February, 2012





SDI
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NBU 1022-3N4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5198 & KB 4 @ 5202.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5198 & KB 4 @ 5202.00ft (ASSUMED)
Site:	NBU 1022-3K PAD	North Reference:	True
Well:	NBU 1022-3N4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Project	UTAH - UTM (feet), NAD27, Zone 12N		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 1022-3K PAD, SECTION 3 T10S R22E				
Site Position:	Northing:	14,520,782.07 usft	Latitude:	39.974881	
From:	Lat/Long	Easting:	2,080,965.71 usft	Longitude:	-109.427549
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.01 °

Well	NBU 1022-3N4BS, 1498 FSL 1998 FWL					
Well Position	+N/-S	-3.28 ft	Northing:	14,520,778.45 usft	Latitude:	39.974872
	+E/-W	-19.62 ft	Easting:	2,080,946.16 usft	Longitude:	-109.427619
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,198.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	02/08/12	10.96	65.84	52,259

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	170.12

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	20.00	170.12	1,279.82	-170.20	29.66	2.00	2.00	0.00	170.12	
3,010.43	20.00	170.12	2,887.10	-746.52	130.08	0.00	0.00	0.00	0.00	
4,010.43	0.00	0.00	3,866.91	-916.73	159.73	2.00	-2.00	0.00	180.00	
10,143.52	0.00	0.00	10,000.00	-916.73	159.73	0.00	0.00	0.00	0.00	PBHL_NBU 1022-3N4



SDI
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NBU 1022-3N4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5198 & KB 4 @ 5202.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5198 & KB 4 @ 5202.00ft (ASSUMED)
Site:	NBU 1022-3K PAD	North Reference:	True
Well:	NBU 1022-3N4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 2.00										
400.00	2.00	170.12	399.98	-1.72	0.30	1.75	2.00	2.00	0.00	
500.00	4.00	170.12	499.84	-6.87	1.20	6.98	2.00	2.00	0.00	
600.00	6.00	170.12	599.45	-15.46	2.69	15.69	2.00	2.00	0.00	
700.00	8.00	170.12	698.70	-27.47	4.79	27.88	2.00	2.00	0.00	
800.00	10.00	170.12	797.47	-42.88	7.47	43.52	2.00	2.00	0.00	
900.00	12.00	170.12	895.62	-61.67	10.75	62.60	2.00	2.00	0.00	
1,000.00	14.00	170.12	993.06	-83.83	14.61	85.10	2.00	2.00	0.00	
1,100.00	16.00	170.12	1,089.64	-109.33	19.05	110.98	2.00	2.00	0.00	
1,200.00	18.00	170.12	1,185.27	-138.13	24.07	140.21	2.00	2.00	0.00	
1,289.56	19.79	170.12	1,270.00	-166.70	29.05	169.22	2.00	2.00	0.00	
GREEN RIVER										
1,300.00	20.00	170.12	1,279.82	-170.20	29.66	172.77	2.00	2.00	0.00	
Start 1710.43 hold at 1300.00 MD										
1,400.00	20.00	170.12	1,373.78	-203.90	35.53	206.97	0.00	0.00	0.00	
1,500.00	20.00	170.12	1,467.75	-237.59	41.40	241.17	0.00	0.00	0.00	
1,520.48	20.00	170.12	1,487.00	-244.49	42.60	248.18	0.00	0.00	0.00	
BIRDSNEST										
1,600.00	20.00	170.12	1,561.72	-271.29	47.27	275.37	0.00	0.00	0.00	
1,700.00	20.00	170.12	1,655.69	-304.98	53.14	309.58	0.00	0.00	0.00	
1,800.00	20.00	170.12	1,749.66	-338.68	59.01	343.78	0.00	0.00	0.00	
1,900.00	20.00	170.12	1,843.63	-372.37	64.88	377.98	0.00	0.00	0.00	
2,000.00	20.00	170.12	1,937.60	-406.06	70.75	412.18	0.00	0.00	0.00	
2,060.02	20.00	170.12	1,994.00	-426.29	74.28	432.71	0.00	0.00	0.00	
MAHOGANY										
2,100.00	20.00	170.12	2,031.57	-439.76	76.62	446.38	0.00	0.00	0.00	
2,200.00	20.00	170.12	2,125.54	-473.45	82.50	480.59	0.00	0.00	0.00	
2,300.00	20.00	170.12	2,219.51	-507.15	88.37	514.79	0.00	0.00	0.00	
2,400.00	20.00	170.12	2,313.48	-540.84	94.24	548.99	0.00	0.00	0.00	
2,500.00	20.00	170.12	2,407.45	-574.54	100.11	583.19	0.00	0.00	0.00	
2,538.90	20.00	170.12	2,444.00	-587.64	102.39	596.50	0.00	0.00	0.00	
8 5/8"										
2,600.00	20.00	170.12	2,501.42	-608.23	105.98	617.39	0.00	0.00	0.00	
2,700.00	20.00	170.12	2,595.39	-641.92	111.85	651.60	0.00	0.00	0.00	
2,800.00	20.00	170.12	2,689.35	-675.62	117.72	685.80	0.00	0.00	0.00	
2,900.00	20.00	170.12	2,783.32	-709.31	123.59	720.00	0.00	0.00	0.00	
3,000.00	20.00	170.12	2,877.29	-743.01	129.46	754.20	0.00	0.00	0.00	
3,010.43	20.00	170.12	2,887.10	-746.52	130.08	757.77	0.00	0.00	0.00	
Start Drop -2.00										
3,100.00	18.21	170.12	2,971.73	-775.40	135.11	787.08	2.00	-2.00	0.00	
3,200.00	16.21	170.12	3,067.25	-804.55	140.19	816.67	2.00	-2.00	0.00	
3,300.00	14.21	170.12	3,163.74	-830.39	144.69	842.90	2.00	-2.00	0.00	
3,400.00	12.21	170.12	3,261.09	-852.90	148.61	865.75	2.00	-2.00	0.00	
3,500.00	10.21	170.12	3,359.18	-872.05	151.95	885.19	2.00	-2.00	0.00	
3,600.00	8.21	170.12	3,457.88	-887.81	154.69	901.19	2.00	-2.00	0.00	
3,700.00	6.21	170.12	3,557.09	-900.17	156.85	913.74	2.00	-2.00	0.00	
3,800.00	4.21	170.12	3,656.67	-909.12	158.41	922.81	2.00	-2.00	0.00	
3,900.00	2.21	170.12	3,756.51	-914.63	159.37	928.41	2.00	-2.00	0.00	
4,000.00	0.21	170.12	3,856.48	-916.71	159.73	930.52	2.00	-2.00	0.00	



SDI
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NBU 1022-3N4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5198 & KB 4 @ 5202.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5198 & KB 4 @ 5202.00ft (ASSUMED)
Site:	NBU 1022-3K PAD	North Reference:	True
Well:	NBU 1022-3N4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,010.43	0.00	0.00	3,866.91	-916.73	159.73	930.54	2.00	-2.00	0.00
Start 6133.09 hold at 4010.43 MD									
4,100.00	0.00	0.00	3,956.48	-916.73	159.73	930.54	0.00	0.00	0.00
4,200.00	0.00	0.00	4,056.48	-916.73	159.73	930.54	0.00	0.00	0.00
4,300.00	0.00	0.00	4,156.48	-916.73	159.73	930.54	0.00	0.00	0.00
4,400.00	0.00	0.00	4,256.48	-916.73	159.73	930.54	0.00	0.00	0.00
4,467.52	0.00	0.00	4,324.00	-916.73	159.73	930.54	0.00	0.00	0.00
WASATCH									
4,500.00	0.00	0.00	4,356.48	-916.73	159.73	930.54	0.00	0.00	0.00
4,600.00	0.00	0.00	4,456.48	-916.73	159.73	930.54	0.00	0.00	0.00
4,700.00	0.00	0.00	4,556.48	-916.73	159.73	930.54	0.00	0.00	0.00
4,800.00	0.00	0.00	4,656.48	-916.73	159.73	930.54	0.00	0.00	0.00
4,900.00	0.00	0.00	4,756.48	-916.73	159.73	930.54	0.00	0.00	0.00
5,000.00	0.00	0.00	4,856.48	-916.73	159.73	930.54	0.00	0.00	0.00
5,100.00	0.00	0.00	4,956.48	-916.73	159.73	930.54	0.00	0.00	0.00
5,200.00	0.00	0.00	5,056.48	-916.73	159.73	930.54	0.00	0.00	0.00
5,300.00	0.00	0.00	5,156.48	-916.73	159.73	930.54	0.00	0.00	0.00
5,400.00	0.00	0.00	5,256.48	-916.73	159.73	930.54	0.00	0.00	0.00
5,500.00	0.00	0.00	5,356.48	-916.73	159.73	930.54	0.00	0.00	0.00
5,600.00	0.00	0.00	5,456.48	-916.73	159.73	930.54	0.00	0.00	0.00
5,700.00	0.00	0.00	5,556.48	-916.73	159.73	930.54	0.00	0.00	0.00
5,800.00	0.00	0.00	5,656.48	-916.73	159.73	930.54	0.00	0.00	0.00
5,900.00	0.00	0.00	5,756.48	-916.73	159.73	930.54	0.00	0.00	0.00
6,000.00	0.00	0.00	5,856.48	-916.73	159.73	930.54	0.00	0.00	0.00
6,100.00	0.00	0.00	5,956.48	-916.73	159.73	930.54	0.00	0.00	0.00
6,200.00	0.00	0.00	6,056.48	-916.73	159.73	930.54	0.00	0.00	0.00
6,300.00	0.00	0.00	6,156.48	-916.73	159.73	930.54	0.00	0.00	0.00
6,400.00	0.00	0.00	6,256.48	-916.73	159.73	930.54	0.00	0.00	0.00
6,500.00	0.00	0.00	6,356.48	-916.73	159.73	930.54	0.00	0.00	0.00
6,600.00	0.00	0.00	6,456.48	-916.73	159.73	930.54	0.00	0.00	0.00
6,700.00	0.00	0.00	6,556.48	-916.73	159.73	930.54	0.00	0.00	0.00
6,785.52	0.00	0.00	6,642.00	-916.73	159.73	930.54	0.00	0.00	0.00
MESAVERDE									
6,800.00	0.00	0.00	6,656.48	-916.73	159.73	930.54	0.00	0.00	0.00
6,900.00	0.00	0.00	6,756.48	-916.73	159.73	930.54	0.00	0.00	0.00
7,000.00	0.00	0.00	6,856.48	-916.73	159.73	930.54	0.00	0.00	0.00
7,100.00	0.00	0.00	6,956.48	-916.73	159.73	930.54	0.00	0.00	0.00
7,200.00	0.00	0.00	7,056.48	-916.73	159.73	930.54	0.00	0.00	0.00
7,300.00	0.00	0.00	7,156.48	-916.73	159.73	930.54	0.00	0.00	0.00
7,400.00	0.00	0.00	7,256.48	-916.73	159.73	930.54	0.00	0.00	0.00
7,500.00	0.00	0.00	7,356.48	-916.73	159.73	930.54	0.00	0.00	0.00
7,600.00	0.00	0.00	7,456.48	-916.73	159.73	930.54	0.00	0.00	0.00
7,700.00	0.00	0.00	7,556.48	-916.73	159.73	930.54	0.00	0.00	0.00
7,800.00	0.00	0.00	7,656.48	-916.73	159.73	930.54	0.00	0.00	0.00
7,900.00	0.00	0.00	7,756.48	-916.73	159.73	930.54	0.00	0.00	0.00
8,000.00	0.00	0.00	7,856.48	-916.73	159.73	930.54	0.00	0.00	0.00
8,100.00	0.00	0.00	7,956.48	-916.73	159.73	930.54	0.00	0.00	0.00
8,200.00	0.00	0.00	8,056.48	-916.73	159.73	930.54	0.00	0.00	0.00
8,300.00	0.00	0.00	8,156.48	-916.73	159.73	930.54	0.00	0.00	0.00
8,400.00	0.00	0.00	8,256.48	-916.73	159.73	930.54	0.00	0.00	0.00
8,500.00	0.00	0.00	8,356.48	-916.73	159.73	930.54	0.00	0.00	0.00
8,600.00	0.00	0.00	8,456.48	-916.73	159.73	930.54	0.00	0.00	0.00
8,700.00	0.00	0.00	8,556.48	-916.73	159.73	930.54	0.00	0.00	0.00



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Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NBU 1022-3N4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5198 & KB 4 @ 5202.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5198 & KB 4 @ 5202.00ft (ASSUMED)
Site:	NBU 1022-3K PAD	North Reference:	True
Well:	NBU 1022-3N4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,800.00	0.00	0.00	8,656.48	-916.73	159.73	930.54	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,756.48	-916.73	159.73	930.54	0.00	0.00	0.00	
8,945.52	0.00	0.00	8,802.00	-916.73	159.73	930.54	0.00	0.00	0.00	
SEGO - SEGO_NBU 1022-3N4BS										
9,000.00	0.00	0.00	8,856.48	-916.73	159.73	930.54	0.00	0.00	0.00	
9,100.00	0.00	0.00	8,956.48	-916.73	159.73	930.54	0.00	0.00	0.00	
9,118.52	0.00	0.00	8,975.00	-916.73	159.73	930.54	0.00	0.00	0.00	
CASTLEGATE										
9,200.00	0.00	0.00	9,056.48	-916.73	159.73	930.54	0.00	0.00	0.00	
9,300.00	0.00	0.00	9,156.48	-916.73	159.73	930.54	0.00	0.00	0.00	
9,400.00	0.00	0.00	9,256.48	-916.73	159.73	930.54	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,356.48	-916.73	159.73	930.54	0.00	0.00	0.00	
9,543.52	0.00	0.00	9,400.00	-916.73	159.73	930.54	0.00	0.00	0.00	
BLACKHAWK										
9,600.00	0.00	0.00	9,456.48	-916.73	159.73	930.54	0.00	0.00	0.00	
9,700.00	0.00	0.00	9,556.48	-916.73	159.73	930.54	0.00	0.00	0.00	
9,800.00	0.00	0.00	9,656.48	-916.73	159.73	930.54	0.00	0.00	0.00	
9,900.00	0.00	0.00	9,756.48	-916.73	159.73	930.54	0.00	0.00	0.00	
10,000.00	0.00	0.00	9,856.48	-916.73	159.73	930.54	0.00	0.00	0.00	
10,100.00	0.00	0.00	9,956.48	-916.73	159.73	930.54	0.00	0.00	0.00	
10,143.52	0.00	0.00	10,000.00	-916.73	159.73	930.54	0.00	0.00	0.00	
TD at 10143.52 - PBHL_NBU 1022-3N4BS										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
SEGO_NBU 1022-3N4B - hit/miss target - Shape	0.00	0.00	8,802.00	-916.73	159.73	14,519,864.69	2,081,122.03	39.972355	-109.427049	
- plan hits target center - Circle (radius 25.00)										
PBHL_NBU 1022-3N4B - hit/miss target - Shape	0.00	0.00	10,000.00	-916.73	159.73	14,519,864.69	2,081,122.03	39.972355	-109.427049	
- plan hits target center - Circle (radius 100.00)										

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,538.90	2,444.00	8 5/8"	8.625	11.000		



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Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NBU 1022-3N4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5198 & KB 4 @ 5202.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5198 & KB 4 @ 5202.00ft (ASSUMED)
Site:	NBU 1022-3K PAD	North Reference:	True
Well:	NBU 1022-3N4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,289.56	1,270.00	GREEN RIVER			
1,520.48	1,487.00	BIRDSNEST			
2,060.02	1,994.00	MAHOGANY			
4,467.52	4,324.00	WASATCH			
6,785.52	6,642.00	MESAVERDE			
8,945.52	8,802.00	SEGO			
9,118.52	8,975.00	CASTLEGATE			
9,543.52	9,400.00	BLACKHAWK			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
300.00	300.00	0.00	0.00	Start Build 2.00	
1,300.00	1,279.82	-170.20	29.66	Start 1710.43 hold at 1300.00 MD	
3,010.43	2,887.10	-746.52	130.08	Start Drop -2.00	
4,010.43	3,866.91	-916.73	159.73	Start 6133.09 hold at 4010.43 MD	
10,143.52	10,000.00	-916.73	159.73	TD at 10143.52	

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Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-3K PAD

<u>API #</u>	<u>NBU 1022-3K1CS</u>			
	Surface: 1493 FSL / 1969 FWL	NESW	Lot	
	BHL: 2047 FSL / 2147 FWL	NESW	Lot	
<u>API #</u>	<u>NBU 1022-3K4BS</u>			
	Surface: 1494 FSL / 1978 FWL	NESW	Lot	
	BHL: 1760 FSL / 2154 FWL	NESW	Lot	
<u>API #</u>	<u>NBU 1022-3N1BS</u>			
	Surface: 1501 FSL / 2018 FWL	NESW	Lot	
	BHL: 1244 FSL / 2150 FWL	SESW	Lot	
<u>API #</u>	<u>NBU 1022-3N1CS</u>			
	Surface: 1500 FSL / 2008 FWL	NESW	Lot	
	BHL: 913 FSL / 2150 FWL	SESW	Lot	
<u>API #4304750167</u>	<u>NBU 1022-3N4BS</u>			
	Surface: 1498 FSL / 1998 FWL	NESW	Lot	
	BHL: 583 FSL / 2148 FWL	SESW	Lot	
<u>API #</u>	<u>NBU 1022-3N4CS</u>			
	Surface: 1496 FSL / 1988 FWL	NESW	Lot	
	BHL: 287 FSL / 2143 FWL	SESW	Lot	

This Surface Use Plan of Operations (SUPO) or 13-point plan provides site-specific information for the above-referenced wells.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

An on-site meeting was held on December 6, 2011. Present were:

- David Gordon, Tyler Cox - BLM;
- Jacob Dunham - 609 Consulting;
- John Slaugh, Mitch Batty - Timberline Engineering & Land Surveying, Inc.; and
- Gina Becker, Charles Chase, Doyle Holmes, Casey McGee, Grizz Oleen, Sheila Wopsock - Kerr-McGee

A. Existing Roads:

Existing roads consist of county and improved/unimproved access roads (two-tracks). In accordance with Onshore Order #1, Kerr-McGee will, in accordance with BMPs, improve or maintain existing roads in a condition that is the same as or better than before operations began. New or reconstructed proposed access roads are discussed in Section B.

The existing roads will be maintained in a safe and usable condition. Maintenance for existing roads will continue until final abandonment and reclamation of well pads and/or other facilities, as applicable. Road maintenance will include, but is not limited to, blading, ditching, and/or culvert installation and cleanout. To ensure safe operating conditions, gravel surfacing will be performed where excessive rutting or erosion may occur. Dust control will be performed as necessary to ensure safe operating conditions.

Roads, gathering lines and electrical distribution lines will occupy common disturbance corridors where possible. Where available, roadways will be used as the staging area and working space for installation of gathering lines. All

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disturbances located in the same corridor will overlap each other to the maximum extent possible, while maintaining safe and sound construction and installation practices. Unless otherwise approved or requested in site specific documents, in no case will the maximum disturbance widths of the access road and utility corridors exceed the widths specified in Part D of this document.

Please refer to Topo B, for existing roads.

B. New or Reconstructed Access Roads:

All new or reconstructed roads will be located, designed, and maintained to meet the standards of the BLM. BMPs. Described in the BLM's Surface Operating Standards for Oil and Gas Exploration and Development, 4th Edition (Gold Book) (USDI and USDA, 2007) and/or BLM Manual Section 9113 (1985) will be considered in consultation with the BLM in the design, construction, improvement and maintenance of all new or reconstructed roads. If a new road would cross a water of the United States, Kerr-McGee will adhere to the requirements of applicable Nationwide Permits of the Department of Army Corps of Engineers.

Each new well pad or pad expansion may require construction of a new access road and/or de-commissioning of an older road. Plans, routes, and distances for new roads and road improvements are provided in design packages, exhibits and maps for a project. Project-specific maps are submitted to depict the locations of existing, proposed, and/or decommissioned and include the locations for supporting structures, including, but not limited to, culverts, bridges, low water crossings, range infrastructure, and haul routes, as per OSO 1. Designs for cuts and fills, including spoils source and storage areas, are provided with the road designs, as necessary.

Where safety objectives can be met. As applicable, Kerr-McGee may use unimproved and/or two-track roads for lease operations, to lessen total disturbance.

Road designs will be based on the road safety requirements, traffic characteristics, environmental conditions, and the vehicles the road is intended to carry. Generally, newly constructed unpaved lease roads will be crowned and ditched with the running surfaces of the roads approximately 12-18 feet wide and a total road corridor width not to exceed 45 feet, except where noted in the road design for a specific project. Maximum grade will generally not exceed 8%. Borrow ditches will be back sloped 3:1 or less. Construction BMPs will be employed to control onsite and offsite erosion.

Where topography would direct storm water runoff to an access road or well pad, drainage ditches or other common drainage control facilities, such as V- or wing-ditches, will be constructed to divert surface water runoff. Drainage features, including culverts, will be constructed or installed prior to commencing other operations, including drilling or facilities placement. Riprap will be placed at the inlet and outlet at the culvert(s), as necessary.

Prior to construction, new access road(s) will be staked according to the requirements of OSO 1. Construction activity will not be conducted using frozen or saturated materials or during periods when significant watershed damage (e.g. rutting, extensive sheet soil erosion, formation of rills/gullies, etc.) is likely to occur. Vegetative debris will not be placed in or under fill embankments.

New road maintenance will include, but is not limited to, blading, ditching, culvert installation and cleanout, gravel surfacing where excessive rutting or erosion may occur and dust control, as necessary to ensure safe operating conditions. All vehicular traffic, personnel movement, construction/restoration operations will be confined to the approved area and to existing roadways and/or access routes.

Snow removal will be conducted on an as-needed basis to accommodate safe travel. Snow removal will occur as necessary throughout the year, as will necessary drainage ditch construction. Removed snow may be stored on permitted well pads to reduce hauling distances and/or at the aerial extent of approved disturbance boundaries to facilitate snow removal for the remainder of the season.

If a county road crossing or encroachment permit is needed, it will be obtained prior to construction.

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The following segments are "on-lease"

- ±180' (0.03 miles) – Section 3 T10S R22E (NE/4 SW/4) – On-lease UTU-01191, from the east edge of pad re-route county road curving southeasterly to merge into the existing road. Please refer to Topo B.
- ±130' (0.02 miles) – Section 3 T10S R22E (NE/4 SW/4) – On-lease UTU-01191, from the west edge of pad re-route county road curving southwesterly to merge into the existing road. Please refer to Topo B.

C. Location of Existing Wells:

- A) Refer to Topo Map C.

D. Location of Existing and/or Proposed Facilities:

This pad will expand the existing pad for the NBU 1022-3K-4T, which is a producing gas well, and the NBU 87J, which is a plugged and abandoned well, according to Utah Division of Oil, Gas and Mining (UDOGM) records on February 10, 2012. Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee Oil and Gas Onshore LP (Kerr-McGee).

Should the well(s) prove productive, production facilities will be installed on the disturbed portion of each well pad. A berm will be constructed completely around production components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will generally be constructed of compacted subsoil or corrugated metal, and will hold the capacity of the largest tank and have sufficient freeboard to accommodate a 25 year rainfall event. This includes pumping units. Aboveground structures constructed or installed onsite for 6 months or longer, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with the BLM (typically Shadow Gray). A production facility layout is provided as part of a project-specific APD, ROW or NOS submission.

GAS GATHERING

Please refer to Exhibit A and Topo D2- Pad and Pipeline Detail.

The gas gathering pipeline material: Steel line pipe. Surface = Bare pipe. Buried = Coated with fusion bonded epoxy coating (or equivalent). The total gas gathering pipeline distance from the meter to the tie in point is ±4,235' and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

- ±5' (0.00 miles) – Section 3 T10S R22E (NE/4 SW/4) – On-lease UTU-01191, BLM surface, New 8" buried gas gathering pipeline from the meter to tie-in to the proposed 16" buried pipeline at the NBU 1022-3J intersection. Please refer to Topo D2 - Pad and Pipeline Detail.
- ±2,055' (0.39 miles) – Section 3 T10S R22E (N/2 SW/4) – On-lease UTU-01191, BLM surface, New 16" buried gas gathering pipeline from the NBU 1022-3J intersection to the NBU 1022-3M intersection. This pipeline will be used concurrently with the NBU 1022-3O and NBU 1022-3J pad. Please refer to Exhibit A, Line 3.
- ±1,640' (0.31 miles) – Section 3 T10S R22E (NW/4 SW/4) – On-lease UTU-01191, BLM surface, New 16" buried gas gathering pipeline from the NBU 1022-3M intersection with a short westerly bend into 10S, 22E, Section 4, then northeasterly to the NBU 1022-3L intersection in 10S, 22E, Section 3. This pipeline will be used concurrently with the NBU 1022-3O, NBU 1022-3J and the NBU 1022-3M pads. Please refer to Exhibit A, Line 2.
- ±535' (0.1 miles) – Section 3 T10S R22E (NW/4 SW/4) – On-lease UTU-01191, BLM surface, New 16" buried gas gathering pipeline from the NBU 1022-3L intersection to the approved 16" gas pipeline located in 10S, 22E, Section 4. This pipeline will be used concurrently with the NBU 1022-3O, NBU 1022-3J, NBU 1022-3M and the NBU 1022-3L pad. Please refer to Exhibit A, Line 1.

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LIQUID GATHERING

Please refer to Exhibit B and Topo D2- Pad and Pipeline Detail.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 4,235'$ and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

- $\pm 5'$ (0.00 miles) – Section 3 T10S R22E (NE/4 SW/4) – On-lease UTU-01191, BLM surface, New 6" buried liquid gathering pipeline from the separator to the NBU 1022-3J intersection. Please refer to Topo D2 - Pad and Pipeline Detail.
- $\pm 2,055'$ (0.39 miles) – Section 3 T10S R22E (NE/4 SW/4) – On-lease UTU-01191, BLM surface, New 6" buried liquid gathering pipeline from the NBU 1022-3J intersection to the NBU 1022-3M intersection. This pipeline will be used concurrently with the NBU 1022-3O and NBU 1022-3J pad. Please refer to Exhibit B, Line 3.
- $\pm 1,640'$ (0.31 miles) – Section 3 T10S R22E (NW/4 SW/4) – On-lease UTU-01191, BLM surface, New 6" buried liquid gathering pipeline from the NBU 1022-3M intersection with a short westerly bend into 10S, 22E, Section 4, then northeasterly to the NBU 1022-3L intersection in 10S, 22E, Section 3. This pipeline will be used concurrently with the NBU 1022-3O, NBU 1022-3J and the NBU 1022-3M pads. Please refer to Exhibit B, Line 2.
- $\pm 535'$ (0.1 miles) – Section 3 T10S R22E (NW/4 SW/4) – On-lease UTU-01191, BLM surface, New 6" buried liquid gathering pipeline from the NBU 1022-3L intersection to the approved liquid pipeline located in 10S, 22E, Section 4. This pipeline will be used concurrently with the NBU 1022-3O, NBU 1022-3J, NBU 1022-3M and the NBU 1022-3L pads. Please refer to Exhibit B, Line 1.

Pipeline Gathering Construction

Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee. Gas gathering pipeline(s), gas lift, or liquids pipelines may be constructed to lie on the surface or be buried. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. The area of disturbance during construction from the edge of road or well pad will typically be 30' in width. Where pipelines run cross country, the width of disturbance will typically be 45 ft for buried lines and 30 ft for surface lines. In addition, Kerr-McGee requests for a permanent 30' disturbance width that will be maintained for the portion adjacent to the road. The need for the 30' permanent disturbance width is for maintenance and repairs. Cross country permanent disturbance width also are required to be 30ft.

Above-ground installation will generally not require clearing of vegetation or blading of the surface, except where safety considerations necessitate earthwork. In some surface pipeline installation instances pipe cannot be constructed where it will lay. In these cases where an above-ground pipeline is constructed parallel and adjacent to a road, it will be welded/fused on the road and then lifted from the road to the pipeline route. In other cases where a pipeline route is not parallel and adjacent to a road (cross-country between sites), it will be welded/fused in place at a well pad, access road, or designated work area and pulled between connection locations with a suitable piece of equipment.

Buried pipelines will generally be installed parallel and adjacent to existing and/or newly constructed roads and within the permitted disturbance corridor. Buried pipelines may vary from 2 inches (typically fuel gas lines) to 24 inches (typically transportation lines) in diameter, but 6 to 16 inches is typical for a buried gas line. The diameter of liquids pipelines may vary from 2 inches to 12 inches, but 6 inches is the typical diameter. Gas lift lines may vary from 2 to 12 inches in diameter, but 6-inch diameter pipes are generally used for gas lift. If two or more pipelines are present (gas gathering, gas lift, and fluids), they will share a common trench where possible.

Typically, to install a buried pipeline, topsoil will be removed, windrowed and placed on the non-working side of the route for later reclamation. Because working room is limited, the spoil may be spread out across the working side and construction will take place on the spoil. The working side of the corridor will be used for pipe stringing, bending, welding and equipment travel. Small areas on the working side displaying ruts or uneven ground will be groomed to facilitate the safe passage of equipment. After the pipelines are installed, spoil will be placed back into the trench, and the topsoil will be

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redistributed over the disturbed corridor prior to final reclamation. Typical depth of the trench will be 6 feet, but depths may vary according to site-specific conditions (presence of bedrock, etc.). The proposed trench width for the pipeline would range from 18-48 inches.

The pipeline will be welded along the proposed route and lowered into place. Trenching equipment will cut through the soil or into the bedrock and create good backfill, eliminating the need to remove large rocks. The proposed buried pipeline will be visually and radiographically inspected and the entire pipeline will be pneumatically or hydrostatically tested before being placed into service. Routine vehicle traffic will be prevented from using pipeline routes as travel ways by posting signs at the route's intersection with an access road.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

If pipelines or roads encounter a drainage that could be subject to flooding or surface water during extreme precipitation events, Kerr-McGee will apply all applicable Army Corps mandates as well as the BLM's Hydraulic Considerations for Pipeline Crossings of Stream Channels (BLM Technical Note 423, April 2007). In addition, all stream and drainage crossings will be evaluated to determine the need for stream alteration permits from the State of Utah Division of Water Rights and if necessary, required permits will be secured. Similarly, where a road or pipeline crossing exists the pipe will be butt welded and buried to a depth between 24 and 48 inches or more. Dirt roads will be cut and restored to a condition equivalent to the existing condition. All Uintah County road encroachment and crossing permits, where applicable, will be obtained prior to crossing construction. In no case will pressure testing of pipelines result in discharge of liquids to the surface.

Pipeline signs will be installed along the route to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves and lateral T's will be installed at various locations for production integrity and safety purposes.

Upon completion of the proposed buried pipeline, the entire area of disturbance will be reclaimed to the standards proposed in the Green River District Reclamation Guidelines. Please refer to section J for more details regarding final reclamation.

When no longer deemed necessary by the operator, Kerr-McGee or it's successor will consult with the BLM, Vernal Field Office before terminating of the use of the pipeline(s).

The Anadarko Completions Transportation System (ACTS) information:

Please refer to Exhibit C for ACTs Lines

Kerr-McGee will use either a closed loop drilling system that will require one pit and one storage area to be constructed on the drilling pad or a traditional drilling operation with one pit. The storage area will be used to contain only the de-watered drill cuttings and will be lined and reclaimed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit is lined and will be used for the wells drilled on the pad or used as part of our Anadarko Completions Transportation (ACTS) system which is discussed in more detail below. Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completion pit.

If Kerr-McGee does not use a closed loop system, it will construct a drilling reserve pit to contain drill cuttings and for use in completion operations. Depending on the location of the pit, its relation to future drilling locations, the reserve/completion pit will be utilized for the completion of the wells on that pad and/or be used as part of our ACTS system.

Kerr-McGee will use ACTS to optimize the completion processes for multiple pads across the project area which may include up to a section of development. ACTS will facilitate management of frac fluids by utilizing existing reserve pits

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and temporary, surface-laid aluminum liquids transfer lines between frac locations. The pit will be refurbished as follows when a traditional drill pit is used: mix and pile up drill cuttings with dry dirt, bury the original liner in the pit, walk bottom of pit with cat. Kerr-McGee will reline the pit with a 30 mil liner and double felt padding. The refurbished pit will be the same size or smaller as specified in the originally approved ROW/APD. The pit refurb will be done in a normal procedure and there will be no modification to the pit.

All four sides of the completions pit will be fenced in according to standard pit fencing procedures. Netting will be installed over all pits.

Any hydrocarbons collected will be treated and sold at approved sales facilities. A loading rack with drip containment will also be installed where water trucks would unload and load to prevent damage caused from pulling hoses in and out of the pit .

ACTS will require temporarily laying multiple 6" aluminum water transfer lines on the surface between either existing or refurbished reserve pits. Please see the attached ACTS exhibit C for placement of the proposed temporary lines. The temporary aluminum transfer lines will be utilized to transport frac fluid being injected and/or recovered during the completion process and will be laid adjacent to existing access roads or pipeline corridors. Upon completion of the frac operation, the liquids transfer lines will be flushed with fresh water and purged with compressed air. The contents of the transfer lines will be flushed into a water truck for delivery to another ACTS location or a reserve pit.

The volume of frac fluid transported through a water transfer line will vary, but volume is projected to be approximately 1.75 bbls per 50-foot joint. Although the maximum working pressure is 125 psig, the liquids transfer lines will be operated at a pressure of approximately 30 to 40 psig. Kerr-McGee requests to keep the netted pit open for one year from first production of the first produced well on the pad. During this time the surrounding well location completion fluids may be recycled in this pit and utilized for other frac jobs in the area. After one year Kerr-McGee will backfill the pit and reclaim. If the pit is not needed for an entire year it will be backfilled and reclaimed earlier. Kerr-McGee understands that due to the temporary nature of this system, BLM considers this a casual use situation; therefore, no permanent ROW or temporary use plan will need to be issued by the BLM.

E. Location and Types of Water Supply:

Water for drilling and completion operations will be obtained from the following sources:

Permit # 49-2307	JD Field Services	Green River- Section 15, T2N, R22E
Permit # 49-2321	R.N. Industries	White River- Section 2, T10S, R24E
Permit # 49-2319	R.N. Industries	White River- Various Sources
Permit # 49-2320	R.N. Industries	Green River- Section 33, T8S, R23E

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

F. Construction Materials:

Construction operations will typically be completed with native materials found on location. Construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source (described in site-specific documents). No construction materials will be removed from federal lands without prior approval from the BLM. A source location other than an on-location construction site will be designated either via a map or narrative within the project specific materials provided to the BLM.

G. Methods for Handling Waste:

All wastes subject to regulation will be handled in compliance with applicable laws to minimize the potential for leaks or spills to the environment. Kerr-McGee also maintains a Spill Control and Countermeasure Plan, which includes notification requirements, including the BLM, for all reportable spills of oil, produced liquids, and hazardous materials.

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Any accidental release, such as a leak or spill in excess of the reportable quantity, as established by 40 CFR Part 117.3, will be reported as per the requirements of CERCLA, Section 102 B. If a release involves petroleum hydrocarbons or produced liquids, Kerr-McGee will comply with the notification requirements of NTL-3A. Drill cuttings and/or drilling fluids will be contained in the reserve/frac pit whether a closed loop system is used or not. Cuttings will be buried in pit(s) upon closure. Unless specifically approved by the BLM, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface precipitation runoff into the pit (via appropriate placement of subsoil storage areas and/or construction of berms, ditches, etc). Should unexpected liquid petroleum hydrocarbons (crude oil or condensate) be encountered during drilling, completions or well testing, liquid petroleum hydrocarbons will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be released into a reserve/completion pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by the BLM. Should timely removal not be feasible, the pit will be netted as soon as practical. Similarly, hydrocarbon removal will take place prior to the closure of the pit, unless authorization is provided for disposal via alternate pit closure methods (e.g. solidification).

The reserve and/or fracture stimulation pit will be lined with an impermeable liner. The liner will be a synthetic material 30 mil or thicker. The bottom and side walls of the pit will be void of any sharp rocks that could puncture the liner. The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. After evaporation and when dry, the reserve pit liners will be cut off, ripped and/or folded back (as safety considerations allow) as near to the mud surface as possible and buried on location or hauled to a landfill prior to backfilling the pit with a minimum of five feet of soil material.

Where necessary and if conditions (freeboard, etc.) allow, produced liquids from newly completed wells may be temporarily disposed of into pits for a period not to exceed 90 days as per Onshore Order Number 7 (OSO 7). Subsequently, permanent approved produced water disposal methods will be employed in accordance with OSO 7 and/or as described in a Water Management Plan (WMP). Otherwise, fluids disposal locations and associated haul routes, for ROW consideration, are typically depicted on Topo A of individual projects. Revisions to the water source or method of transportation will be subject to written approval from the BLM.

Any additional pits necessary for subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after one year from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse (trash and other solid waste including cans, paper, cable, etc.) generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility. Immediately after removal of the drilling rig, all debris and other waste materials not contained within trash receptacles will be collected and removed from the well location.

For the protection of livestock and wildlife, all open pits (excluding flare pits) will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet. Siphons, catchments, and absorbent pads will be installed to keep hydrocarbons produced by the drilling rig or other equipment on location from entering the reserve pit. Hydrocarbons, contaminated pads, and/or soils will be disposed of in accordance with state and federal requirements.

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

Materials Management

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

Hazardous materials may be contained in some grease or lubricants, solvents, acids, paint, and herbicides, among others as defined above. Kerr-McGee maintains a file, per 29 CFR 1910.1200 (g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances that are used during the course of construction, drilling, completion, and production operations for this project. The transport, use, storage and handling of hazardous materials will follow procedures specified by federal and state regulations. Transportation of hazardous materials to the well location is regulated by the Department of Transportation (DOT) under 49 CFR, Parts 171-180. DOT regulations pertain to the packing, container handling, labeling, vehicle placarding, and other safety aspects.

Potentially hazardous materials used in the development or operation of wells will be kept in limited quantities on well sites and at the production facilities for short periods of time. Chemicals meeting the criteria for being an acutely hazardous material/substance or meet the quantities criteria per BLM Instruction Memorandum No. 93-344 will not be used.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities (crude oil/condensate, produced water). They may also be kept in limited quantities on drilling sites (barite, diesel fuel, cement, cottonseed hulls etc.) for short periods of time during drilling or completion activities.

Fluids disposal and pipeline/haul routes are depicted on Topo Map A.

Any produced water separated from recoverable condensate from the proposed well will be contained in a water tank and will then be transported by pipeline and/or truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E
 NBU #159 in Sec. 35 T9S R21E
 Ace Oilfield in Sec. 2 T6S R20E
 MC&MC in Sec. 12 T6S R19E
 Pipeline Facility in Sec. 36 T9S R20E
 Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E
 Bonanza Evaporation Pond in Sec. 2 T10S R23E

Or to one of the following Kerr-McGee active Salt Water Disposal (SWD) wells:

NBU 159 SWD in Sec. 35 T9S R21E
 CIGE 112D SWD in Sec. 19 T9S R21E
 CIGE 114 SWD in Sec. 34 T9S R21E
 NBU 921-34K SWD in Sec. 34 T9S R21E
 NBU 921-33F SWD in Sec. 34 T9S R21E

H. Ancillary Facilities:

No additional ancillary facilities are planned for this location.

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I. Well Site Layout:

The location, orientation and aerial extent of each drill pad, reserve/completion/flare pit (for closed loop or non-closed loop operations), access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure, proposed cuts and fills, and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment depending on whether a closed loop system is used. Surface distance may be less if using closed loop. But in either case, the area of disturbance will not exceed the maximum disturbance outlined in the attached exhibits.

For the protection of livestock and wildlife, all open pits and cellars will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Each well will utilize either a centralized tank battery, centralized fluids management system, or have tanks installed on its pad. Production/ Produced Liquid tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks will be kept reasonably free from surface accumulations of liquid hydrocarbons. The tanks are not to be used for disposal of liquids from additional sources without prior approval of BLM.

J. Plans for Surface Reclamation:

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

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

Interim Reclamation

Interim reclamation may include pit evaporation, fluid removal, pit solidification, re-contouring, ripping, spreading top soil, seeding, and/or weed control. Interim reclamation will be performed in accordance with OSO 1, or written notification will be provided to the BLM for approval. Where feasible, drilling locations, reserve pits, or access routes not utilized for production operations will be re-contoured to a natural appearance.

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

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

Final Reclamation

Final reclamation will be performed for unproductive wells and after the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be

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reclaimed may be requested by Kerr-McGee. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. The BLM will be notified prior to commencement of reclamation operations. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

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

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

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

Measures Common to Interim and Final Reclamation

Soil preparation will be conducted using a disk for areas in need of more soil preparation following site preparation. This will provide primary soil tillage to a depth no greater than 6 inches. Prior to reseeding, compacted areas will be scarified by ripping or chiseling to loosen compacted soils, promote water infiltration, and improve soil aeration and root penetration.

Seeding will occur year-round as conditions allow and will typically be accomplished through the use of a no-till rangeland style seed drill with a "picker box" in order to seed "fluffy" seed. Where drill seeding is not the preferred method, seed will be broadcast and then raked into the ground at double the rate of drill seeding. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-vegetation. The seed mixes will be selected from a list provided by or approved by the BLM, or a specific seed mix will be proposed by Kerr-McGee to the BLM and used after its approval. The selected specific seed mix for each well location and road segment will be utilized while performing interim and final reclamation for each project. All seed will be certified and tags will be maintained by Kerr-McGee. Every effort will be made to obtain "cheat grass free seed".

Seed Mix to be used for Well Site, Access Road, and Pipeline (as applicable):

Bonanza Area Mix	Pure Live Seed lbs/acre
Crested Wheat (Hycrest)	2
Bottlebrush Squirreltail	1
Western Wheatgrass (Arriba)	1
Indian Ricegrass	1
Fourwing Saltbush	2
Shadscale	2
Forage Kochia	0.25
Rocky Mountain Bee	0.5
Total	9.75

Additional soil amendments and/or stabilization may be required on sites with poor soils and/or excessive erosion potential. Where severe erosion can become a problem and/or the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. Slopes will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to: erosion control blankets, hydro-mulch, and/or bonded fiber matrix at a rate to

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achieve a minimum of 80 percent soil coverage. Soil amendments such as "Sustain" (an organic fertilizer that will be applied at the rate 1,800 – 2,100 lbs/acre with seed) may also be dry broadcast or applied with hydro-seeding equipment.

Weed Control

All weed management will be done in accordance with the Vernal BLM Surface Disturbance Weed Policy. Noxious weeds will be controlled, as applicable, on project areas. Monitoring and management of noxious and/or invasive weeds of concern will be completed annually until the project is deemed successfully reclaimed by the surface management agency and/or owner according to the Anadarko Integrated Weed Management Plan. Noxious weed infestations will be mapped using a GPS unit and submitted to the BLM with information required in the Vernal BLM Surface Disturbance Weed Policy. If herbicide is to be applied it will be done according to an approved Pesticide Use Permit (PUP), inclusive of applicable locations. All pesticide applications will be recorded using a Pesticide Application Record (PAR) and will be submitted along with a Pesticide Use Report (PUR) annually prior to Dec. 31.

Monitoring

Monitoring of reclaimed project areas will be completed annually during the growing season and actions to ensure reclamation success will be taken as needed. During the first two growing seasons an ocular methodology will be used to determine the success of the reclamation activities. During the 3rd growing season a 200 point line intercept (quantitative) methodology will be used to obtain basal cover. The goal is to have the reclaimed area reach 30% basal cover when compared to the reference site. If after three growing seasons the area has not reached 30% basal cover, additional reclamation activities may be necessary. Monitoring will continue until the reclaimed area reaches 75% basal cover of desirable vegetation when compared to the reference site. (Green River District Reclamation Guidelines)

All monitoring reports will be submitted electronically to the Vernal BLM in the form of a geo-database no later than March 1st of the calendar year following the data collection.

K. Surface/Mineral Ownership:

United States of America
 Bureau of Land Management
 170 South 500 East
 Vernal, UT 84078
 (435)781-4400

L. Other Information:

Onsite Specifics:

- Construction: 30 Mil Double Felt
- Trim stockpile to be in line with corner 6 going west and extend piles west of corner 8.
- Top Soil: Need to save 4" topsoil and will be move and put around the corner
- Need to obtain a storm water permit
- BMP on the pit use (waddles, hay bails or silt fence)

Cultural and Paleontological Resources

All personnel are strictly prohibited from collecting artifacts, any paleontological specimens or fossils, and from disturbing any significant cultural resources in the area. If artifacts, fossils, or any culturally sensitive materials are exposed or identified in the area of construction, all construction operations that would affect the newly discovered resource will cease, and Kerr-McGee will provide immediate notification to the BLM.

Resource Reports:

A Class I literature review was completed on February 1, 2012 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 11-404.

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A paleontological reconnaissance survey was completed on February 3, 2012 by Intermountain Paleo Consultants. For additional details please refer to report IPC 11-202PRE.

Biological field survey was completed on June 15, 2011 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-690.

Proposed Action Annual Emissions Tables:

Table 1: Proposed Action Annual Emissions (tons/year)¹			
Pollutant	Development	Production	Total
NOx	3.8	0.12	3.92
CO	2.2	0.11	2.31
VOC	0.1	4.9	5
SO ₂	0.005	0.0043	0.0093
PM ₁₀	1.7	0.11	1.81
PM _{2.5}	0.4	0.025	0.425
Benzene	2.2E-03	0.044	0.046
Toluene	1.6E-03	0.103	0.105
Ethylbenzene	3.4E-04	0.005	0.005
Xylene	1.1E-03	0.076	0.077
n-Hexane	1.7E-04	0.145	0.145
Formaldehyde	1.3E-02	8.64E-05	1.31E-02

¹ Emissions include 1 producing well and associated operations traffic during the year in which the project is developed

Table 2: Proposed Action versus 2012 WRAP Phase III Emissions Inventory Comparison			
Species	Proposed Action Production Emissions (ton/yr)	WRAP Phase III 2012 Uintah Basin Emission Inventory^a (ton/yr)	Percentage of Proposed Action to WRAP Phase III
NOx	23.52	16,547	0.14%
VOC	30	127,495	0.02%

^a http://www.wrapair.org/forums/ogwg/PhaseIII_Inventory.html

Uintah Basin Data

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

Gina T. Becker
Regulatory Analyst II
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6086

Tommy Thompson
General Manager, Drilling
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

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

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

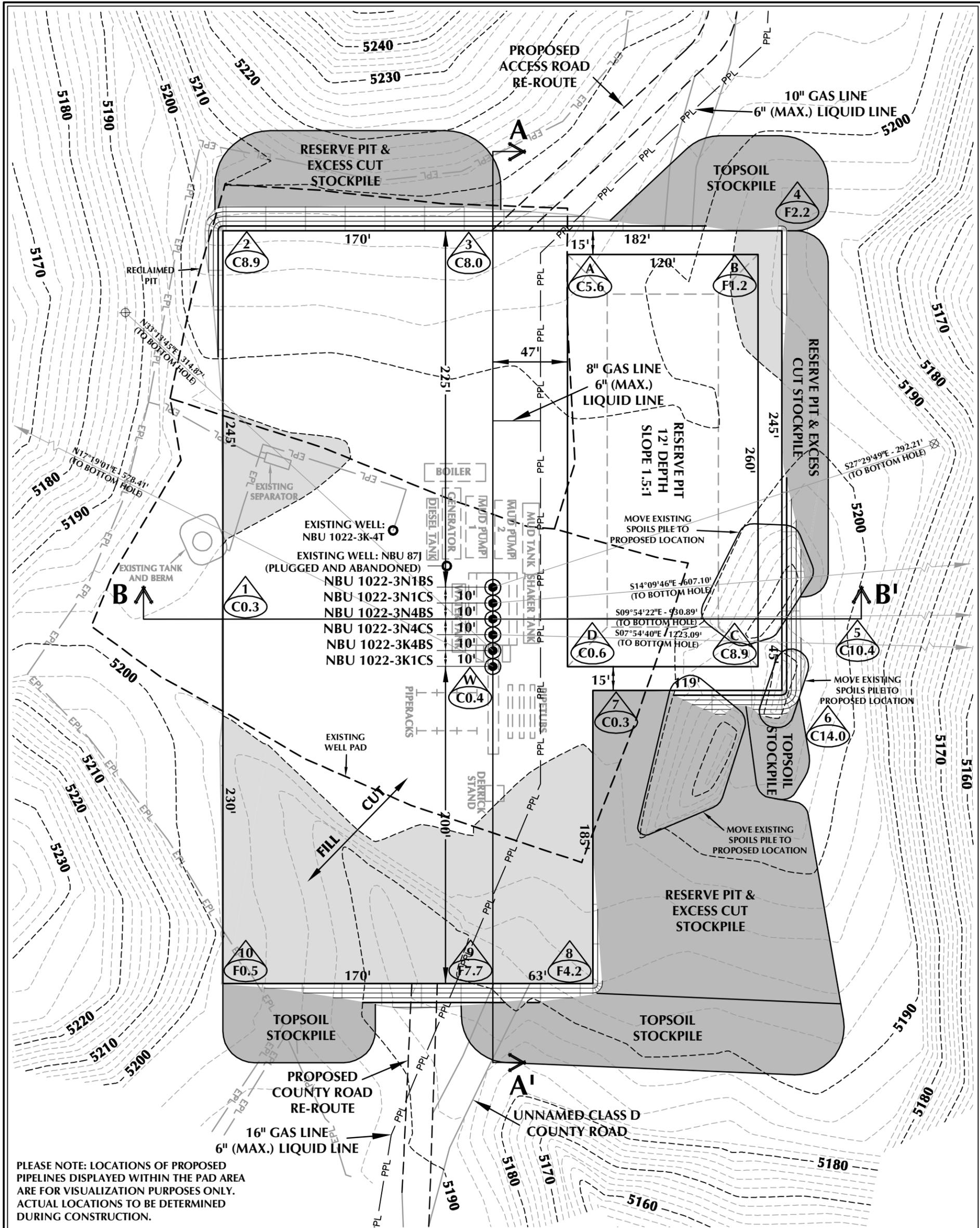
Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

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


Gina T. Becker

February 15, 2012
Date



PLEASE NOTE: LOCATIONS OF PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

WELL PAD - NBU 1022-3K DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5198.4'
 FINISHED GRADE ELEVATION = 5198.0'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1
 TOTAL WELL PAD AREA = 3.57 ACRES
 TOTAL DISTURBANCE AREA = 4.94 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-3K

WELL PAD - LOCATION LAYOUT
 NBU 1022-3N1BS, NBU 1022-3N1CS,
 NBU 1022-3N4BS, NBU 1022-3N4CS,
 NBU 1022-3K4BS & NBU 1022-3K1CS
 LOCATED IN SECTION 3, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH



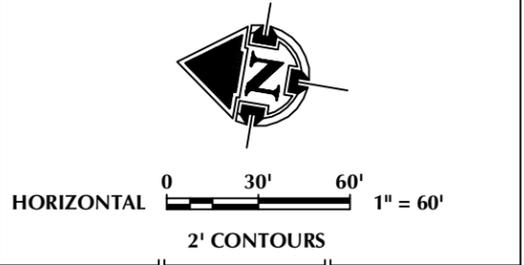
CONSULTING, LLC
 2155 North Main Street
 Sheridan, WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

WELL PAD QUANTITIES
 TOTAL CUT FOR WELL PAD = 7,322 C.Y.
 TOTAL FILL FOR WELL PAD = 5,297 C.Y.
 TOPSOIL @ 6" DEPTH = 1,937 C.Y.
 EXCESS MATERIAL = 2,025 C.Y.

RESERVE PIT QUANTITIES
 TOTAL CUT FOR RESERVE PIT
 +/- 11,020 C.Y.
 RESERVE PIT CAPACITY (2' OF FREEBOARD)
 +/- 42,290 BARRELS

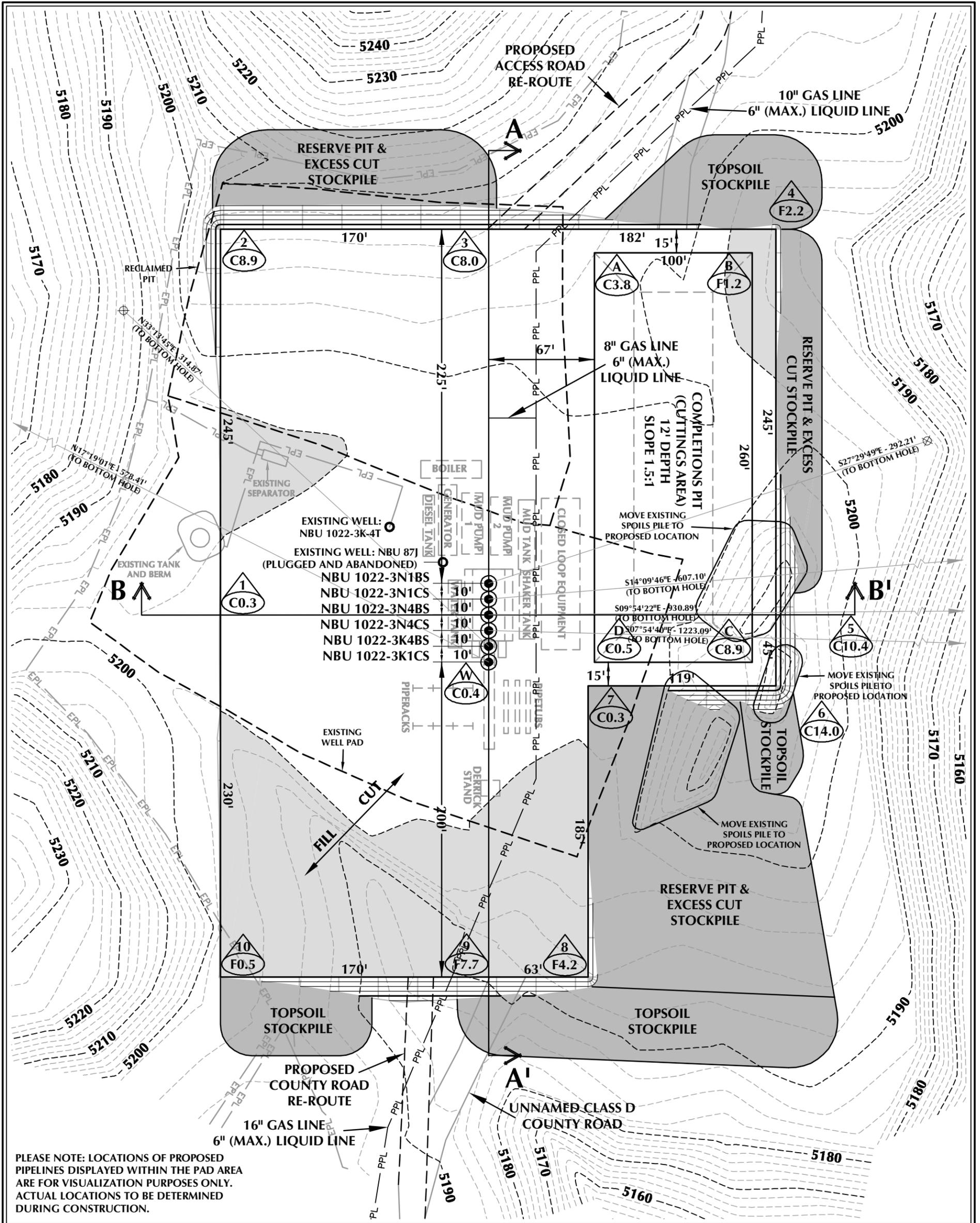
WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PROPOSED PIPELINE
- EXISTING PIPELINE



TIMBERLINE ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078
 (435) 789-1365

SCALE: 1"=60' DATE: 11/18/11 SHEET NO:
 REVISED: 1/11/12 **8** 8 OF 18



PLEASE NOTE: LOCATIONS OF PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

WELL PAD - NBU 1022-3K (CLOSED LOOP) DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5198.4'
 FINISHED GRADE ELEVATION = 5198.0'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1
 TOTAL WELL PAD AREA = 3.57 ACRES
 TOTAL DISTURBANCE AREA = 4.94 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00

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 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-3K
WELL PAD - LOCATION LAYOUT
 NBU 1022-3N1BS, NBU 1022-3N1CS,
 NBU 1022-3N4BS, NBU 1022-3N4CS,
 NBU 1022-3K4BS & NBU 1022-3K1CS
 LOCATED IN SECTION 3, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH



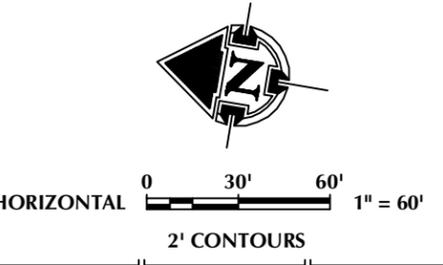
609 CONSULTING, LLC
 2155 North Main Street
 Sheridan, WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

WELL PAD QUANTITIES
 TOTAL CUT FOR WELL PAD = 7,322 C.Y.
 TOTAL FILL FOR WELL PAD = 5,297 C.Y.
 TOPSOIL @ 6" DEPTH = 1,937 C.Y.
 EXCESS MATERIAL = 2,025 C.Y.

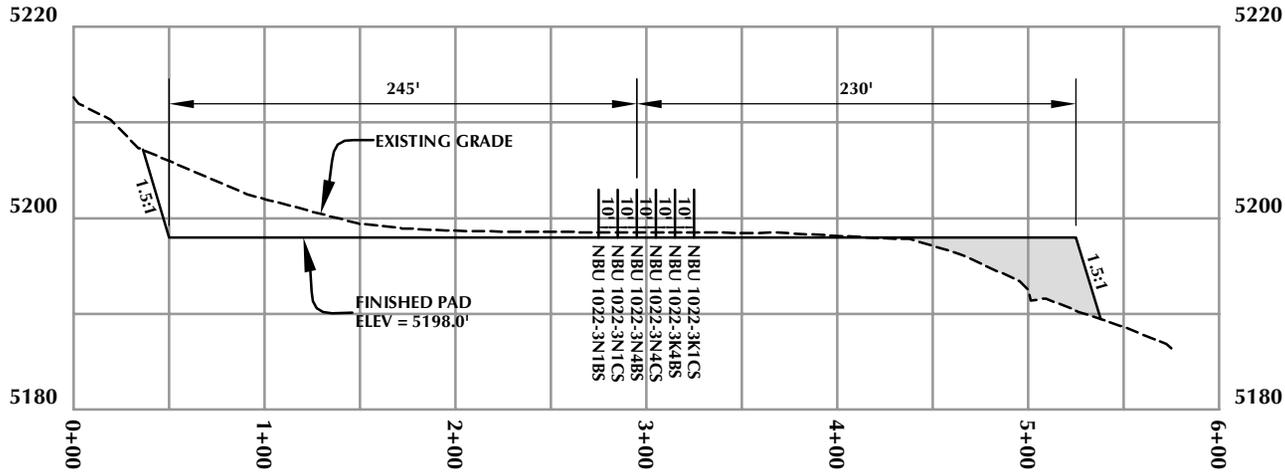
COMPLETIONS PIT QUANTITIES
 TOTAL CUT FOR COMPLETIONS PIT
 +/- 8,870 C.Y.
 COMPLETIONS PIT CAPACITY
 (2' OF FREEBOARD)
 +/- 33,770 BARRELS

TIMBERLINE ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078
 (435) 789-1365

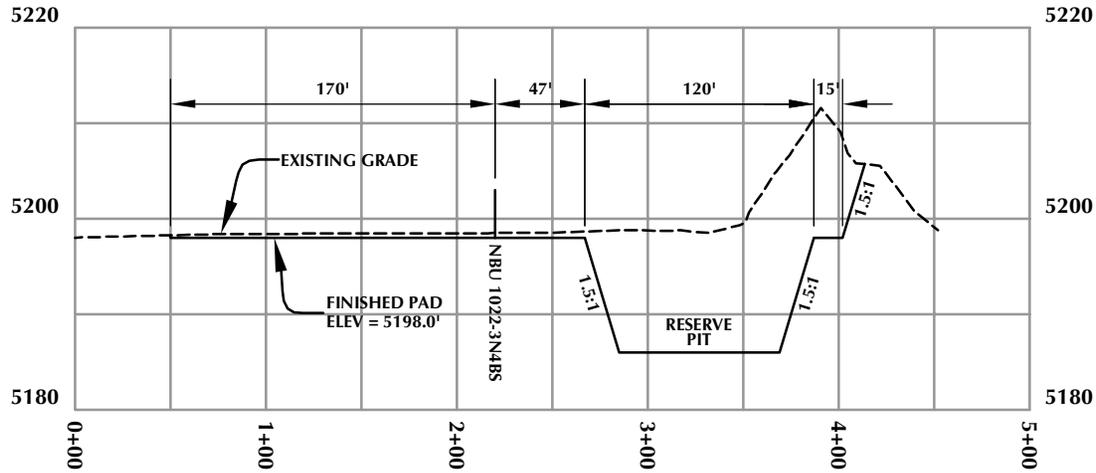
- WELL PAD LEGEND**
- EXISTING WELL LOCATION
 - PROPOSED WELL LOCATION
 - PROPOSED BOTTOM HOLE LOCATION
 - EXISTING CONTOURS (2' INTERVAL)
 - PROPOSED CONTOURS (2' INTERVAL)
 - PROPOSED PIPELINE
 - EXISTING PIPELINE



SCALE: 1"=60' DATE: 11/18/11 SHEET NO:
 REVISED: **8B** 8B OF 18



CROSS SECTION A-A'



CROSS SECTION B-B'

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-3K

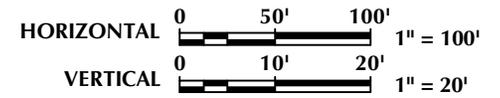
WELL PAD - CROSS SECTIONS
NBU 1022-3N1BS, NBU 1022-3N1CS,
NBU 1022-3N4BS, NBU 1022-3N4CS,
NBU 1022-3K4BS & NBU 1022-3K1CS
LOCATED IN SECTION 3, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH



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

TIMBERLINE
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365



Scale: 1"=100'

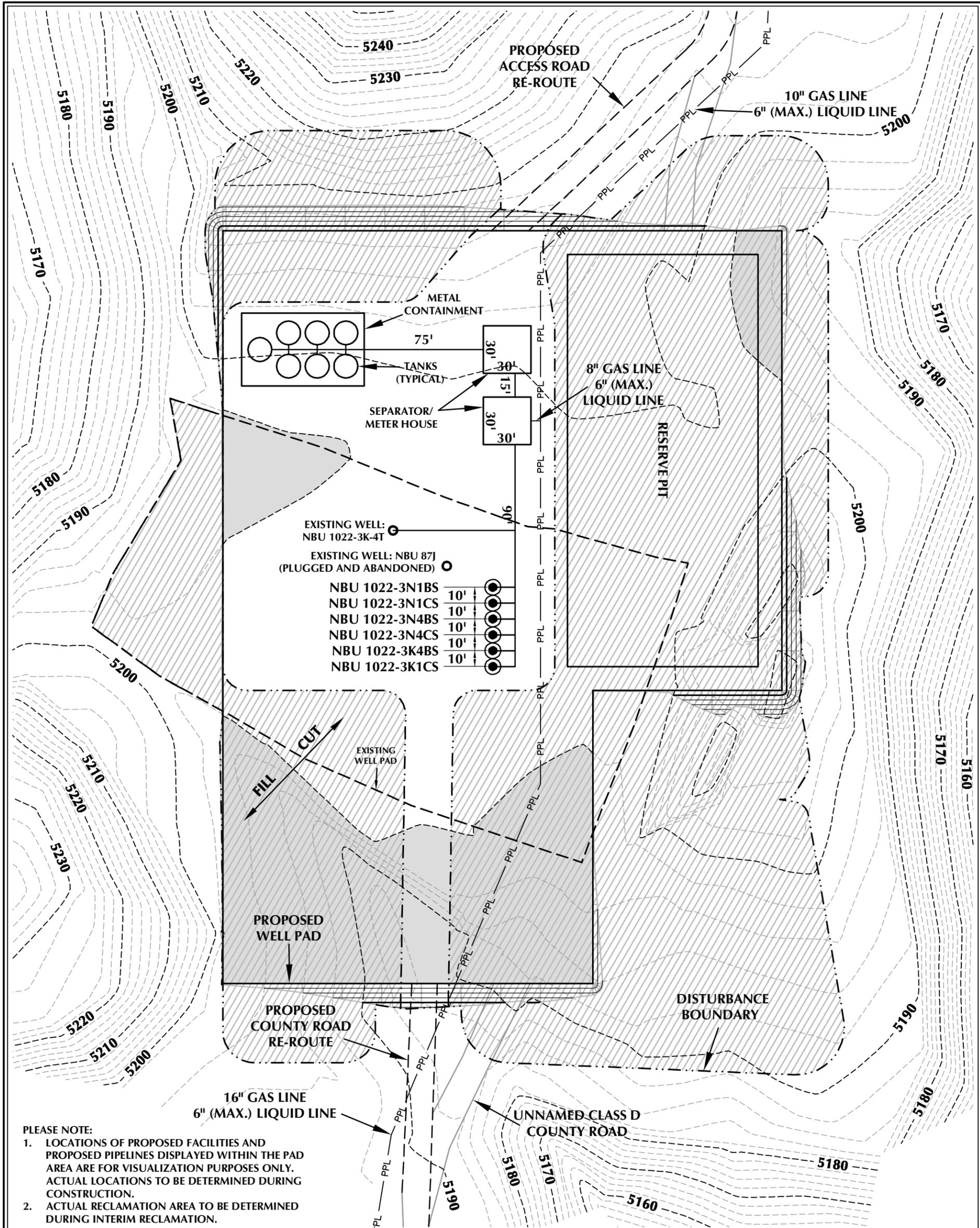
Date: 11/18/11

SHEET NO:

REVISED:

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9 OF 18



PLEASE NOTE:

1. LOCATIONS OF PROPOSED FACILITIES AND PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.
2. ACTUAL RECLAMATION AREA TO BE DETERMINED DURING INTERIM RECLAMATION.

WELL PAD - NBU 1022-3K DESIGN SUMMARY

TOTAL DISTURBANCE AREA = 5.15 ACRES (INCLUDING EXISTING)
 RECLAMATION AREA = 3.76 ACRES
 TOTAL WELL PAD AREA AFTER RECLAMATION = 1.39 ACRES

WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PPL PROPOSED PIPELINE
- EPL EXISTING PIPELINE
- RECLAMATION AREA



HORIZONTAL 0 30' 60' 1" = 60'
 2' CONTOURS

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-3K

WELL PAD - RECLAMATION LAYOUT
 NBU 1022-3N1BS, NBU 1022-3N1CS,
 NBU 1022-3N4BS, NBU 1022-3N4CS,
 NBU 1022-3K4BS & NBU 1022-3K1CS
 LOCATED IN SECTION 3, T10S, R22E,
 S.L.B.&M., Uintah County, Utah



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

TIMBERLINE
 ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

SCALE: 1"=60'

DATE: 1/11/12

SHEET NO:

REVISED:

10 10 OF 18

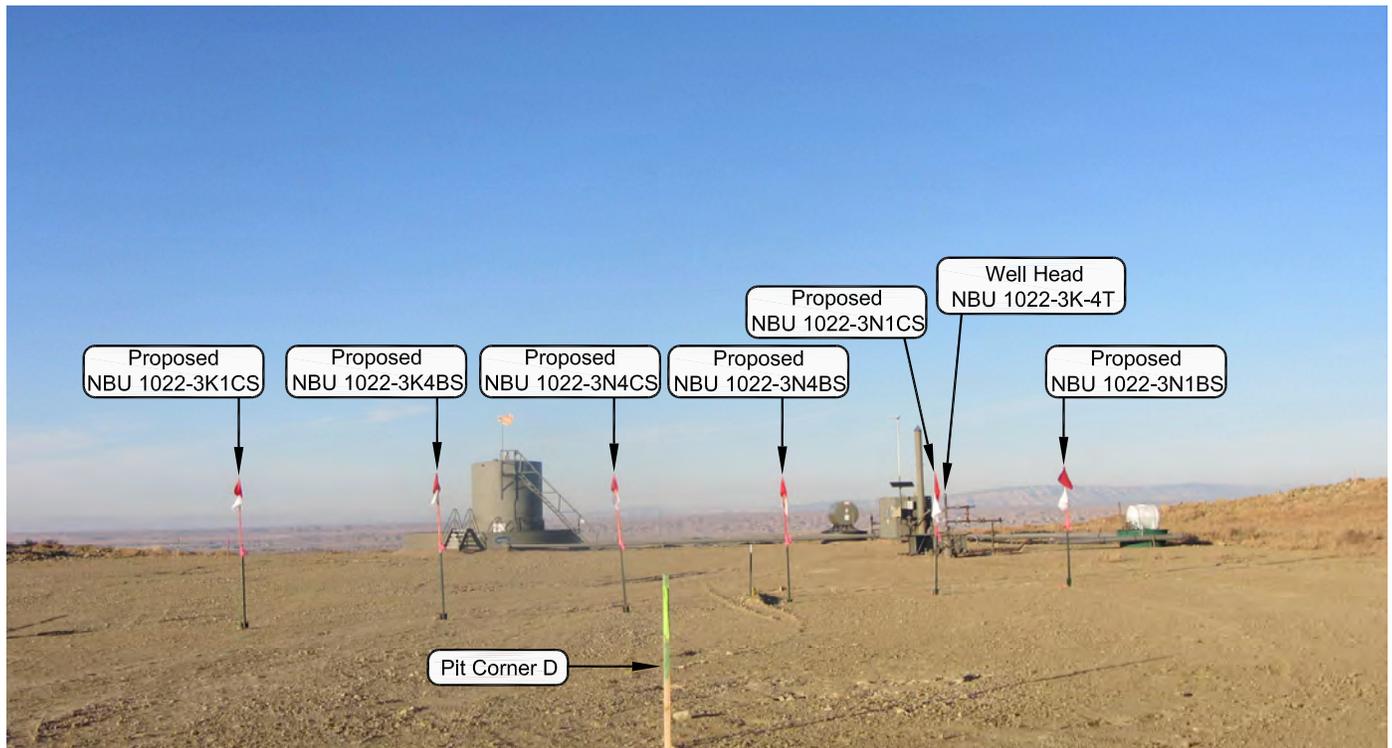


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: EASTERLY

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-3K

LOCATION PHOTOS

NBU 1022-3N1BS, NBU 1022-3N1CS,
NBU 1022-3N4BS, NBU 1022-3N4CS,
NBU 1022-3K4BS & NBU 1022-3K1CS
LOCATED IN SECTION 3, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH.



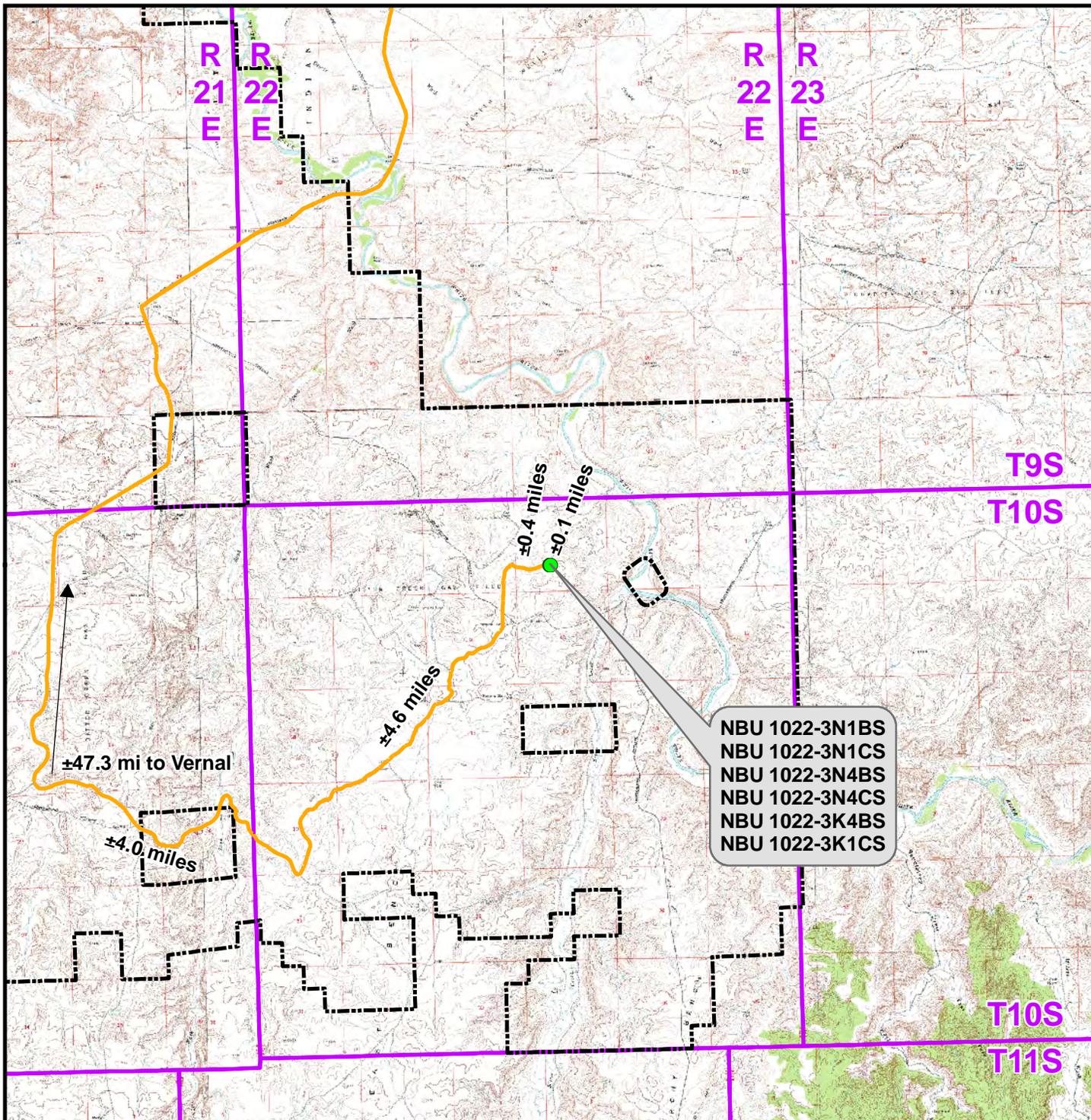
CONSULTING, LLC
2155 North Main Street
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE PHOTOS TAKEN: 11-2-11	PHOTOS TAKEN BY: J.W.	SHEET NO: 11
DATE DRAWN: 11-14-11	DRAWN BY: T.J.R.	
Date Last Revised:		11 OF 18



Legend

- Proposed Well Location
- Natural Buttes Unit Boundary
- Access Route - Proposed

Distance From Well Pad - NBU 1022-3K To Unit Boundary: ±4,615ft

WELL PAD - NBU 1022-3K

TOPO A

NBU 1022-3N1BS, NBU 1022-3N1CS,
 NBU 1022-3N4BS, NBU 1022-3N4CS,
 NBU 1022-3K4BS & NBU 1022-3K1CS
 LOCATED IN SECTION 3, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH

**Kerr-McGee Oil &
 Gas Onshore L.P.**

1099 18th Street
 Denver, Colorado 80202



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



SCALE: 1:100,000

NAD83 USP Central

SHEET NO:

DRAWN: TL

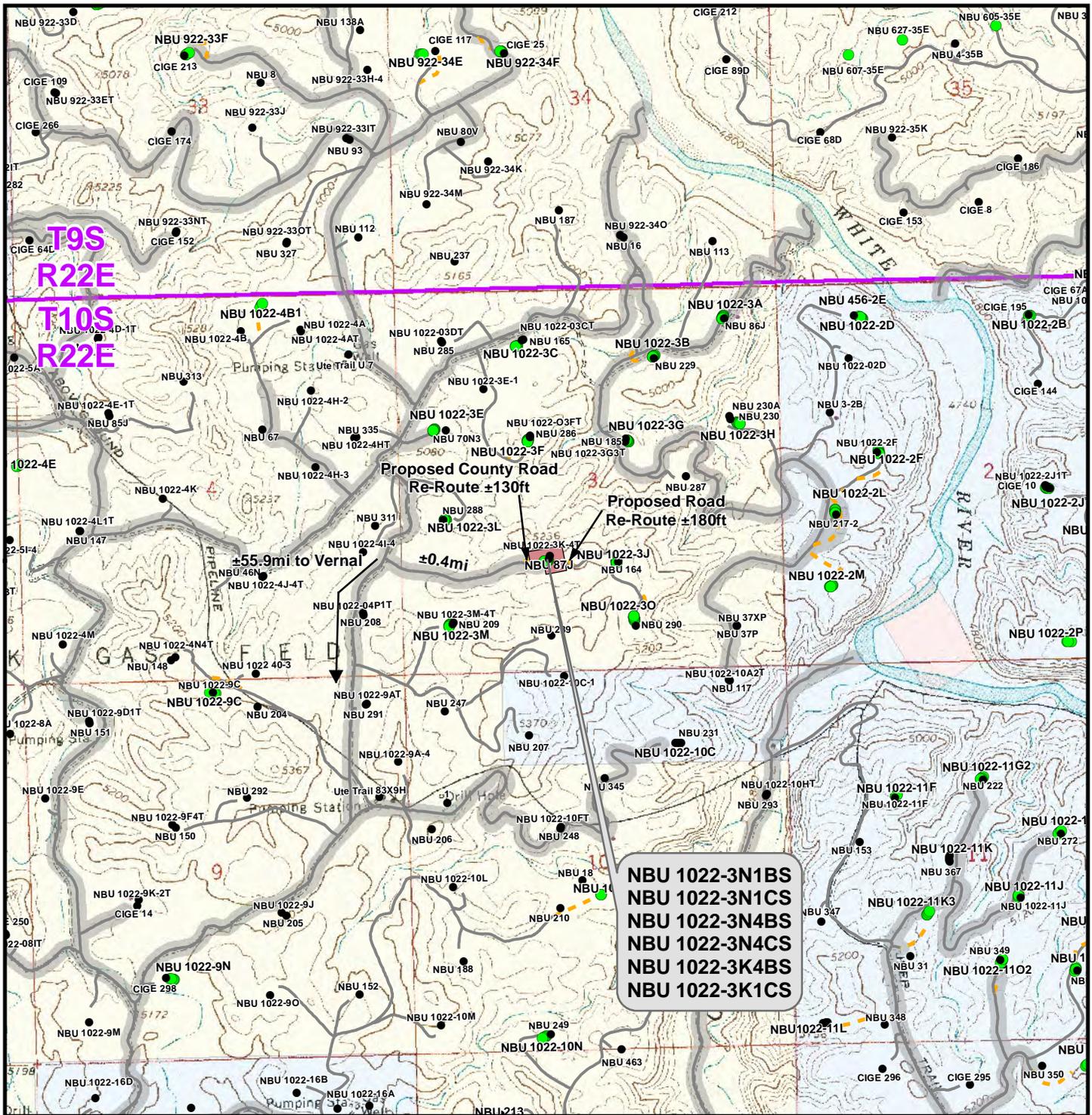
DATE: 18 Nov 2011

12

REVISED:

DATE:

12 OF 18



Legend

- Well - Proposed
- Well - Existing
- Well Pad
- - - Road - Proposed
- - - Road - Existing
- ▬ County Road
- Bureau of Land Management
- Indian Reservation
- ▬ State
- ▬ Private

WELL PAD - NBU 1022-3K

TOPO B
 NBU 1022-3N1BS, NBU 1022-3N1CS,
 NBU 1022-3N4BS, NBU 1022-3N4CS,
 NBU 1022-3K4BS & NBU 1022-3K1CS
 LOCATED IN SECTION 3, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH

**Kerr-McGee Oil &
 Gas Onshore L.P.**

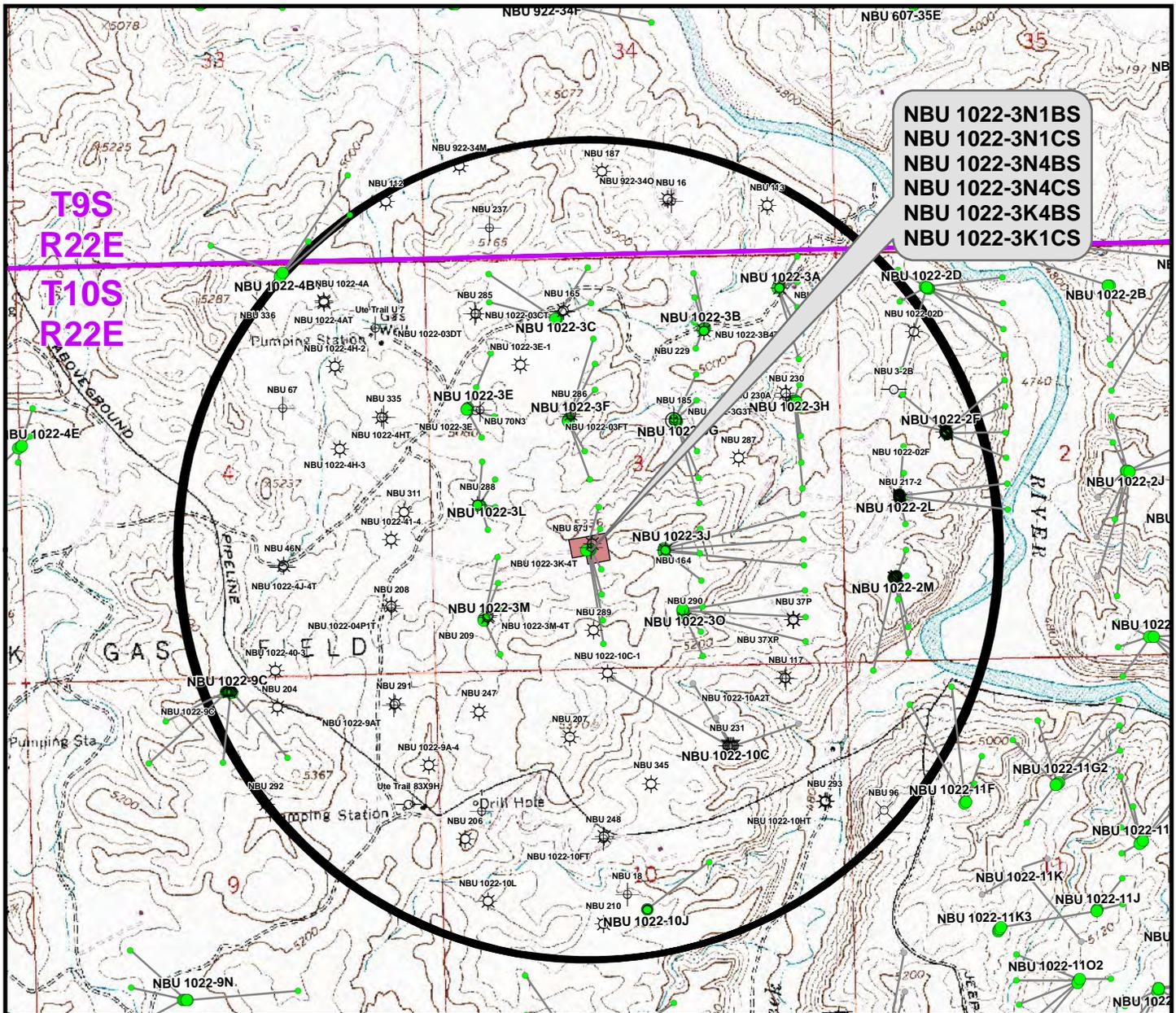
1099 18th Street
 Denver, Colorado 80202

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

N

SCALE: 1" = 2,000ft	NAD83 USP Central	SHEET NO:
DRAWN: TL	DATE: 18 Nov 2011	13
REVISED:	DATE:	

13 OF 18



NBU 1022-3N1BS
 NBU 1022-3N1CS
 NBU 1022-3N4BS
 NBU 1022-3N4CS
 NBU 1022-3K4BS
 NBU 1022-3K1CS

Well locations derived from Utah Division of Oil, Gas and Mining (UDOGM) (oilgas.ogm.utah.gov). The estimated distances from proposed bore locations to the nearest existing bore locations are based on UDOGM data.

Proposed Well	Nearest Well Bore	Footage
NBU 1022-3N1BS	NBU 87J	316ft
NBU 1022-3N1CS	NBU 289	467ft
NBU 1022-3N4BS	NBU 289	173ft
NBU 1022-3N4CS	NBU 289	214ft
NBU 1022-3K4BS	NBU 1022-3K-4T	218ft
NBU 1022-3K1CS	NBU 1022-3K-4T	486ft

Legend

- Well - Proposed
- Well Path
- ☀ Producing
- ⊕ Deferred
- ☀ Active Injector
- ⊕ Plugged & Abandoned
- Bottom Hole - Proposed
- Well Pad
- ☺ Spudded
- ⊗ Cancelled
- ☀ Location Abandoned
- APD Approved
- ⊖ Temporarily Abandoned
- ⊖ Shut-In
- Bottom Hole - Existing
- ◻ Well - 1 Mile Radius
- ⊖ Preliminary Location

WELL PAD - NBU 1022-3K
 TOPO C
 NBU 1022-3N1BS, NBU 1022-3N1CS,
 NBU 1022-3N4BS, NBU 1022-3N4CS,
 NBU 1022-3K4BS & NBU 1022-3K1CS
 LOCATED IN SECTION 3, T10S, R22E,
 S.L.B.&M., Uintah County, Utah

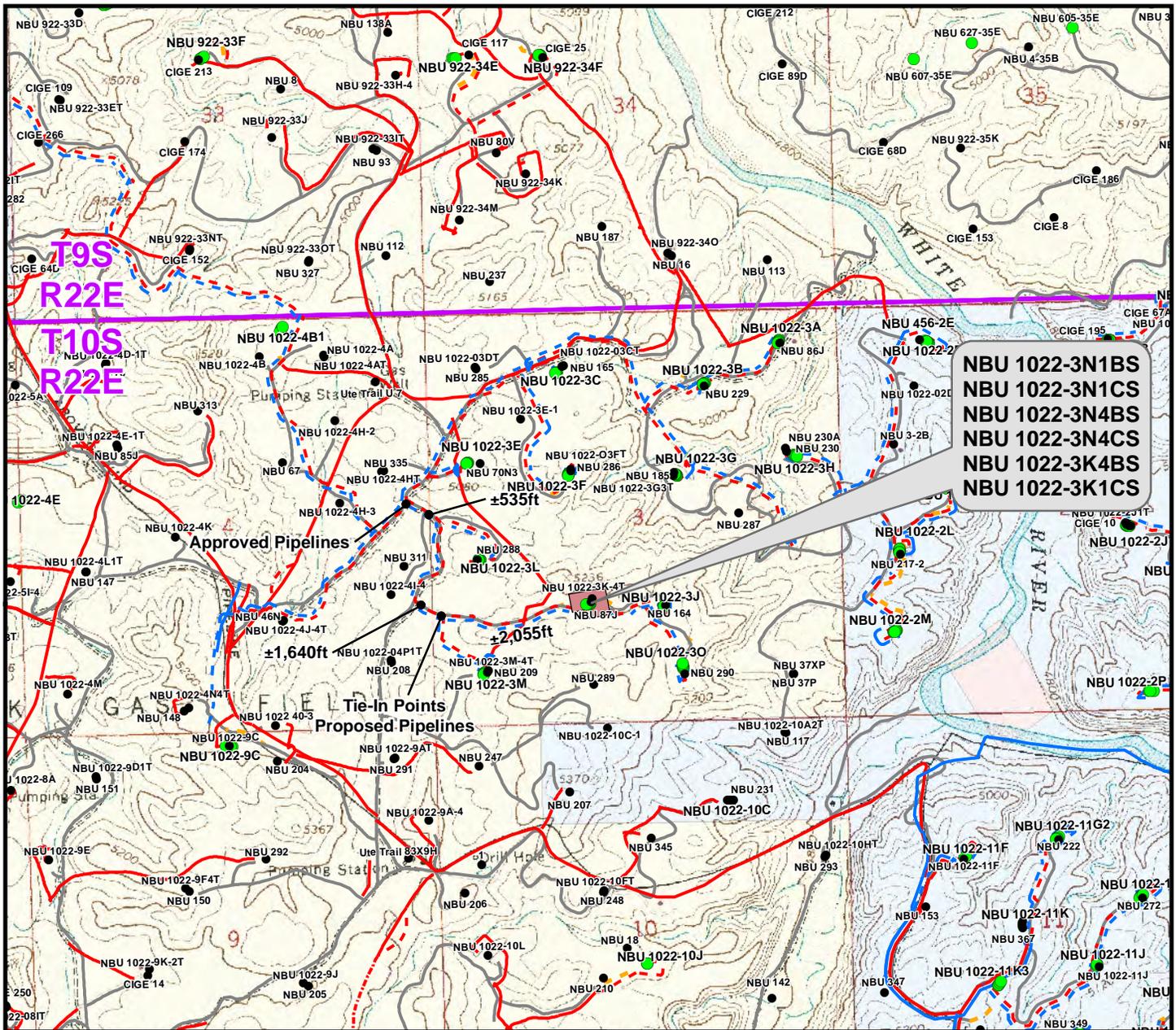
**Kerr-McGee Oil &
 Gas Onshore L.P.**
 1099 18th Street
 Denver, Colorado 80202

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

N

SCALE: 1" = 2,000ft	NAD83 USP Central	14
DRAWN: TL	DATE: 18 Nov 2011	
REVISED:	DATE:	

SHEET NO:
14 OF 18



**NBU 1022-3N1BS
 NBU 1022-3N1CS
 NBU 1022-3N4BS
 NBU 1022-3N4CS
 NBU 1022-3K4BS
 NBU 1022-3K1CS**

Proposed Liquid Pipeline	Length	Proposed Gas Pipeline	Length
Buried 6" (Max.) (Meter House to 3J Intersection)	+5ft	Buried 8" (Meter House to 3J Intersection)	+5ft
Buried 6" (Max.) (3J Intersection to 3M Intersection)	±2,055ft	Buried 16" (3J Intersection to 3M Intersection)	±2,055ft
TOTAL PROPOSED BURIED LIQUID PIPELINE =	±2,060ft	TOTAL PROPOSED BURIED GAS PIPELINE =	±2,060ft

Legend			
● Well - Proposed	- - - Gas Pipeline - Proposed	- - - Liquid Pipeline - Proposed	- - - Road - Proposed
● Well - Existing	- - - Gas Pipeline - To Be Upgraded	- - - Liquid Pipeline - Existing	- - - Road - Existing
■ Well Pad	- - - Gas Pipeline - Existing		
		■ Bureau of Land Management	■ State
		■ Indian Reservation	■ Private

WELL PAD - NBU 1022-3K
 TOPO D
 NBU 1022-3N1BS, NBU 1022-3N1CS,
 NBU 1022-3N4BS, NBU 1022-3N4CS,
 NBU 1022-3K4BS & NBU 1022-3K1CS
 LOCATED IN SECTION 3, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH

**Kerr-McGee Oil &
 Gas Onshore L.P.**
 1099 18th Street
 Denver, Colorado 80202

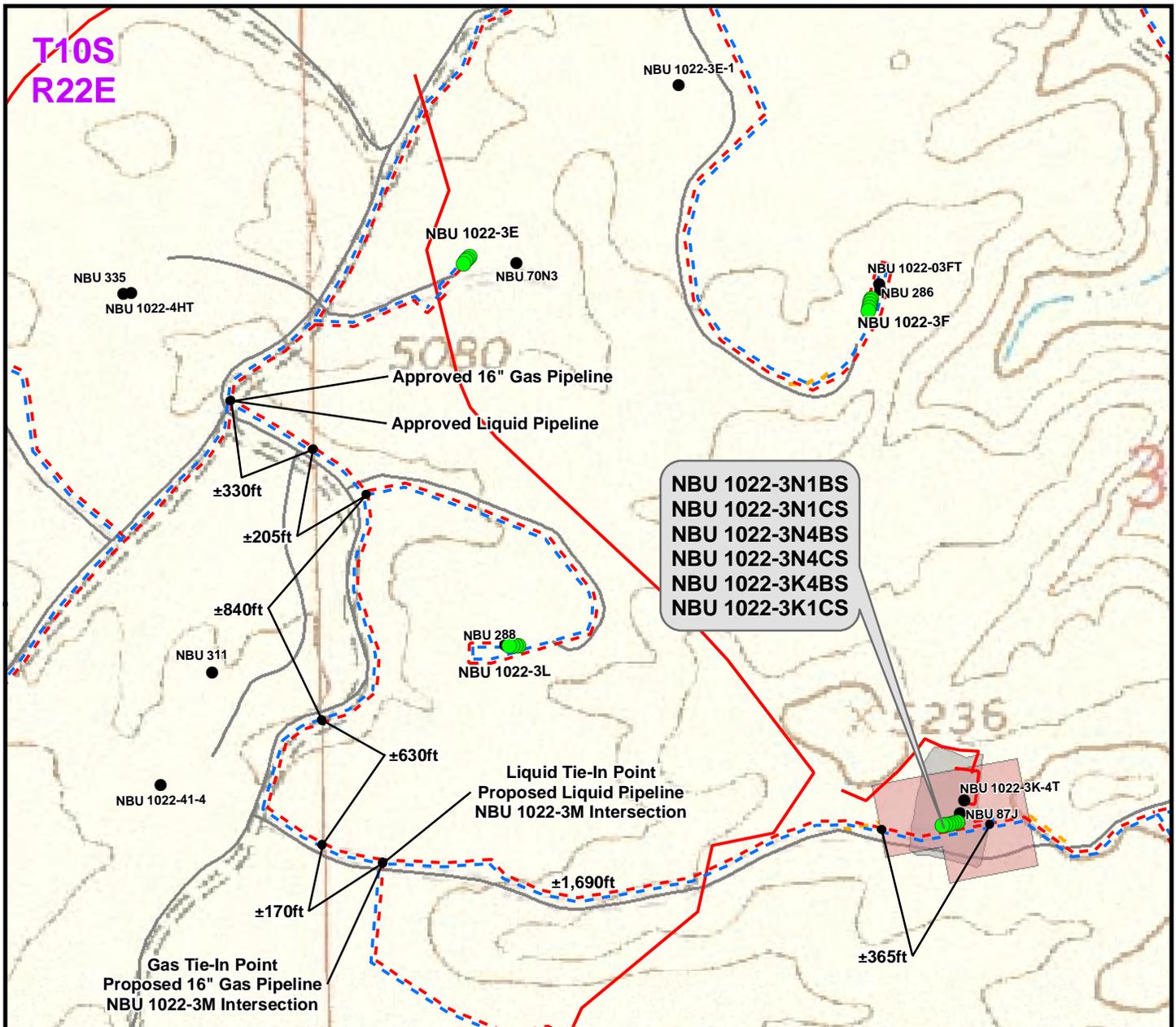


609 CONSULTING, LLC
 2155 North Main Street
 Sheridan, Wyoming 82801
 Phone 307-674-0609
 Fax 307-674-0182

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SCALE: 1" = 2,000ft	NAD83 USP Central	15
DRAWN: TL	DATE: 18 Nov 2011	
REVISED:	DATE:	

SHEET NO:
15 OF 18



Proposed Liquid Pipeline		Length	Proposed Gas Pipeline		Length
Buried 6" (Max.) (Meter House to 3J Intersection)		±5ft	Buried 8" (Meter House to 3J Intersection)		±5ft
Buried 6" (Max.) (3J Intersection to 3M Intersection)		±2,055ft	Buried 16" (3J Intersection to 3M Intersection)		±2,055ft
TOTAL PROPOSED BURIED LIQUID PIPELINE =		±2,060ft	TOTAL PROPOSED BURIED GAS PIPELINE =		±2,060ft

Legend

● Well - Proposed	 Well Pad - Proposed	--- Gas Pipeline - Proposed	--- Liquid Pipeline - Proposed	--- Road - Proposed	 Bureau of Land Management
● Well - Existing	 Well Pad - Existing	--- Gas Pipeline - To Be Upgraded	--- Liquid Pipeline - Existing	--- Road - Existing	 Indian Reservation
		--- Gas Pipeline - Existing			 State
					 Private

WELL PAD - NBU 1022-3K

TOPO D2 (PAD & PIPELINE DETAIL)
 NBU 1022-3N1BS, NBU 1022-3N1CS,
 NBU 1022-3N4BS, NBU 1022-3N4CS,
 NBU 1022-3K4BS & NBU 1022-3K1CS
 LOCATED IN SECTION 3, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH

**Kerr-McGee Oil &
 Gas Onshore L.P.**

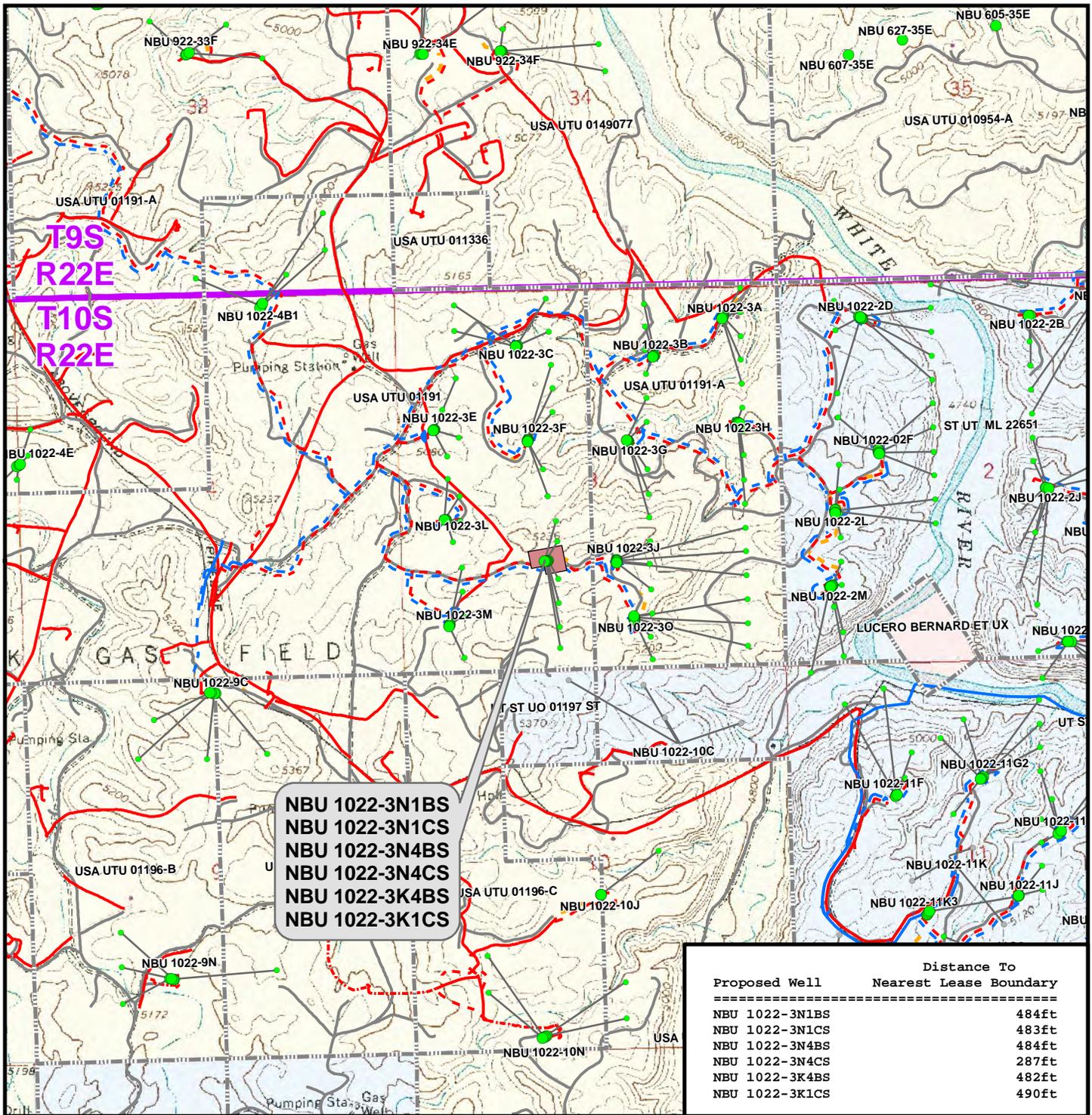
1099 18th Street
 Denver, Colorado 80202

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

N

SCALE: 1" = 500ft	NAD83 USP Central	16
DRAWN: TL	DATE: 18 Nov 2011	
REVISED:	DATE:	

SHEET NO:
16 OF 18



Legend

- Well - Proposed
- Bottom Hole - Proposed
- Bottom Hole - Existing
- Well Path
- Well Pad
- ▭ Lease Boundary
- Gas Pipeline - Proposed
- Gas Pipeline - To Be Upgraded
- Gas Pipeline - Existing
- Liquid Pipeline - Proposed
- Liquid Pipeline - Existing
- Road - Proposed
- Road - Existing
- Bureau of Land Management
- Indian Reservation
- State
- Private

WELL PAD - NBU 1022-3K

TOPO E
 NBU 1022-3N1BS, NBU 1022-3N1CS,
 NBU 1022-3N4BS, NBU 1022-3N4CS,
 NBU 1022-3K4BS & NBU 1022-3K1CS
 LOCATED IN SECTION 3, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH

**Kerr-McGee Oil &
 Gas Onshore L.P.**

1099 18th Street
 Denver, Colorado 80202



CONSULTING, LLC

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

SCALE: 1" = 2,000ft

DRAWN: TL

REVISED:

NAD83 USP Central

DATE: 18 Nov 2011

DATE:

SHEET NO:

17

17 OF 18



Kerr-McGee Oil & Gas Onshore LP
1099 18TH STREET STE. 1800
DENVER, CO 80202
720-929-6708 • FAX 720-929-7708
E-MAIL: JOE.JOHNSON@ANADARKO.COM

February 14, 2012

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

Re: Directional Drilling R649-3-11
NBU 1022-3N4BS
T10S-R22E
Section 3: NESW/SESW
Surface: 1498' FSL, 1998' FWL
Bottom Hole: 583' FSL, 2148' FWL
Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 1022-3N4BS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

A handwritten signature in blue ink, appearing to read 'Joe D. Johnson', with a horizontal line underneath.

Joseph D. Johnson
Landman

RECEIVED

SEP 18 2008
FEB 27 2012

RECEIVED
AUG 08 2012

FORM APPROVED
DIV. OF OIL, GAS & MINING
OMB NO. 4310-0046
Expires: July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BLM VERNAL, UTAH
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-01191
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. If Unit or CA Agreement, Name and No. UTU63047A
3a. Address P.O. BOX 173779 DENVER, COLORADO 80202-3779		8. Lease Name and Well No. NBU 1022-3N4BS
3b. Phone No. (include area code) PHONE 720-929-6086 FAX 720-929-7086		9. API Well No. 4304750167
4. Location of well (Report location clearly and in accordance with any State requirements. *) At surface NESW 1498 FSL 1998 FWL LAT = 39.974838 LONG = -109.428302 At proposed prod. Zone SESW 583 FSL 2148 FWL LAT = 39.972321 LONG = -109.427732		10. Field and Pool, or Exploratory NATURAL BUTTES
14. Distance in miles and direction from the nearest town or post office* Approximately 56 miles Southeast from Vernal, Utah		11. Sec., T., R., M., or Blk. and Survey or Area 3 T 10S R 22E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 484	16. No. of acres in lease 1041.78	12. County or Parish UINTAH
17. Spacing Unit dedicated to this well	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 173	13. State UT
19. Proposed Depth 10144 MD 10000 TVD	20. BLM/ BIA Bond No. on file WYB000291	
21. Elevations (Show whether DF, RT, GR, etc.) 5198.4 GR	22. Approximate date work will start* 8/8/2012	23. Estimated duration 60-90 DAYS

24. Attachments

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

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

25. Signature,	Name (Printed/ Typed) GINA T BECKER	Date February 16, 2012
Title REGULATORY ANALYST II		

Approved By (Signature)	Name (Printed/ Typed) Jerry Kenczka	Date JUL 31 2012
Title Assistant Field Manager Lands & Mineral Resources		
Office VERNAL 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 ATTACHED

Conditions of approval, if any, are attached.

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.

Kerr-McGee Oil & Gas Onshore, L.P. hereby certifies that it is authorized by the proper lease interest owners and responsible under the terms and conditions of the lease to conduct lease operation associated with this application.

UDOGM

NOTICE OF APPROVAL

No NOS APD reported
2/20/2012

DACXSAN12A



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Kerr-McGee Oil & Gas Onshore, LP Location: NESW, Sec. 3, T10S, R22E
Well No: NBU 1022-3N4BS Lease No: UTU-01191
API No: 43-047-50167 Agreement: Natural Buttes Unit

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

**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 Environmental Scientist)	- Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	- 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 Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. 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)**

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.
- The following will be used as standard operating procedures: Green completion or controlled VOC emissions methods with 90% efficiency for Oil or Gas Atmospheric Storage Tanks, VOC Venting controls or flaring, Glycol Dehydration and Amine Unites, Well Completion, Re-Completion, Venting, and Planned Blowdown Emissions.
- All reclamation activities will comply with the Green River Reclamation Guidelines.
- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were previously operated outside the Uinta Basin, to prevent weed seed introduction.
- All disturbance areas shall be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established.
- Noxious and invasive weeds will be controlled by the proponent throughout the area of project disturbance.
- Noxious weeds will be inventoried and reported to BLM in the annual reclamation report. Where an integrated pest management program is applicable, coordination has been undertaken with the state and local management program (if existing). A copy of the pest management plan will be submitted for each project.
- A pesticide use proposal (PUP) will be obtained for the project, by the proponent if applicable.
- A permitted paleontologist is to be present to monitor construction at all well pads during all surface disturbing activities: examples include the following; building of the well pad, access road, and pipelines.

To maintain compliance with current cactus survey protocols, the following measures will be required:

1. If construction does not occur within 4 years of the original survey date, new 100% clearance surveys will be required.
2. Prior to construction within 4 years of the original survey date, a spot check survey will be required during the year of construction. KMG and their respective 3rd party surveyor will refer to the current

Sclerocactus Spot Check Survey Methods, to determine site specific survey distances and intensity levels.

3. Spot check reports will be reported to the BLM and the US Fish and Wildlife Service.
4. Construction will not commence until written approval is received from the BLM.

Discovery Stipulation: Reinitiation of section 7 consultation with the USFWS will be sought immediately if any loss of plants or occupied habitat for Uinta Basin hookless cactus is anticipated as a result of project activities.

- Construction or drilling is not allowed from January 1 – August 31 on the NBU 1022-3O pad to minimize impacts during golden eagle nesting.
- If it is anticipated that construction or drilling will occur during the given timing restriction, a BLM or qualified biologist shall be notified to conduct surveys for raptors. Depending upon the results of the surveys, permission to proceed may or may not be granted by the Authorized Officer.
- The best method to avoid entrainment is to pump from an off-channel location – one that does not connect to the river during high spring flows. An infiltration gallery constructed in a BLM and Service approved location is best.
- If the pump head is located in the river channel where larval fish are known to occur, the following measures apply:
 - a. do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes;
 - b. limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (April 1 to August 31); and
 - c. limit the amount of pumping, to the greatest extent possible, during the pre-dawn hours as larval drift studies indicate that this is a period of greatest daily activity.
- Screen all pump intakes with 3/32 inch mesh material.
- Approach velocities for intake structures will follow the National Marine Fisheries Service's document "Fish Screening Criteria for Anadromous Salmonids." For projects with an in-stream intake that operate in stream reaches where larval fish may be present, the approach velocity will not exceed 0.33 feet per second (ft/s).
- Report any fish impinged on the intake screen to the Service (801.975.3330) and the Utah Division of Wildlife Resources:

Northeastern Region
318 North Vernal Avenue
Vernal, UT 84078
Phone: (435) 781-9453
- Kerr McGee can only use the following water source:
Permit # 49-2307 JD Field Services Green River-Section 15, T2N, R22E

**DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

SITE SPECIFIC DOWNHOLE COAs:

Site Specific Drilling Plan COA's:

- Gamma ray Log shall be run from Total Depth to Surface.

Variances Granted:

Air Drilling

- Properly lubricated and maintained rotating head. Variance granted to use a properly maintained and lubricated diverter bowl in place of a rotating head.
- Blooie line discharge 100' from the well bore. Variance granted for blooie line discharge to be 45' from the well bore.
- Compressors located in the opposite direction from the blooie line a minimum of 100' from the well bore. Variance granted for truck/trailer mounted air compressors located 40' from the well bore.
- In lieu of mud products on location, Kerr McGee will fill the reserve pit with water for the kill medium and will utilize a skid pump near the reserve pit to supply the water to the well bore if necessary.
- Automatic igniter. Variance granted for igniter due to there being no productive formations encountered while air drilling.
- FIT Test. Variance granted due to well known geology and the problems that can occur with the FIT test.

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 Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- 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 Vernal 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 Vernal 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 Vernal 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, Vernal 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 top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to BLM_UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- 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 Vernal 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.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal 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 Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal 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, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal 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 Vernal 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 Vernal 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 Vernal 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 Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal 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.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
8. WELL NAME and NUMBER: NBU 1022-3N4BS	
9. API NUMBER: 43047501670000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
COUNTY: UINTAH	
STATE: UTAH	

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.

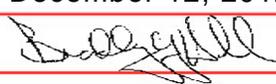
1. TYPE OF WELL Gas Well
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779
PHONE NUMBER: 720 929-6511
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1498 FSL 1998 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 03 Township: 10.0S Range: 22.0E Meridian: S

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 12/23/2012	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining
Date: December 12, 2012
By: 

NAME (PLEASE PRINT) Luke Urban	PHONE NUMBER 720 929-6501	TITLE Regulatory Specialist
SIGNATURE N/A	DATE 12/11/2012	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501670000

API: 43047501670000

Well Name: NBU 1022-3N4BS

Location: 1498 FSL 1998 FWL QTR NESW SEC 03 TWP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 12/23/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
- Has the approved source of water for drilling changed? Yes No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
- Is bonding still in place, which covers this proposed well? Yes No

Signature: Luke Urban

Date: 12/11/2012

Title: Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
8. WELL NAME and NUMBER: NBU 1022-3N4BS	
9. API NUMBER: 43047501670000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
COUNTY: UINTAH	
STATE: UTAH	

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.

1. TYPE OF WELL Gas Well
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779
PHONE NUMBER: 720 929-6511
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1498 FSL 1998 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 03 Township: 10.0S Range: 22.0E Meridian: S

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 1/21/2013	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="Correction"/>

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

The operator wished to correct the lease number. The lease number was incorrectly reported as UTU-01191-A. It should be UTU-01191.

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

FOR RECORD ONLY

January 24, 2013

NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER 720 929-6086	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 1/21/2013	

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: UTU-01191
1. TYPE OF WELL Gas Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	8. WELL NAME and NUMBER: NBU 1022-3N4BS
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1498 FSL 1998 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 03 Township: 10.0S Range: 22.0E Meridian: S	9. API NUMBER: 43047501670000
5. PHONE NUMBER: 720 929-6511	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: Uintah
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 5/16/2013	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

Spud well 05/16/2013 @ 10:00. MIRU Triple A Bucket Rig, drill 20" conductor hole to 40', run 14", 36.7# schedule 10 conductor pipe, cement with 28 sacks ready mix. Anticipated surface spud date and surface casing cement 06/22/2013.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 May 20, 2013

NAME (PLEASE PRINT) Doreen Green	PHONE NUMBER 435 781-9758	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 5/20/2013	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-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.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-3N4BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501670000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1498 FSL 1998 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 03 Township: 10.0S Range: 22.0E Meridian: S	COUNTY: UINTAH	
	STATE: UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/5/2013	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
Drilled to 2,556 ft. in June 2013.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY July 11, 2013		
NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 7/5/2013	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
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COUNTY: UINTAH	
STATE: UTAH	

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.

1. TYPE OF WELL Gas Well	3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	PHONE NUMBER: 720 929-6511
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1498 FSL 1998 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 03 Township: 10.0S Range: 22.0E Meridian: S	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 8/5/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 No activity for the month of July 2013. Well TD at 2,556 ft.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 August 08, 2013**

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 8/5/2013	

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.	
1. TYPE OF WELL Gas Well	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
PHONE NUMBER: 720 929-6511	8. WELL NAME and NUMBER: NBU 1022-3N4BS
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1498 FSL 1998 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 03 Township: 10.0S Range: 22.0E Meridian: S	9. API NUMBER: 43047501670000
	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 9/4/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

Drilled to 8,940 ft. in August 2013.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 October 02, 2013**

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 9/4/2013	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-3N4BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501670000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511 9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1498 FSL 1998 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 03 Township: 10.0S Range: 22.0E Meridian: S	COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 10/4/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

No new activity since last report. Well TD at 8,940 ft.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 October 08, 2013

NAME (PLEASE PRINT) Matthew P Wold	PHONE NUMBER 720 929-6993	TITLE Regulatory Analyst I
SIGNATURE N/A	DATE 10/4/2013	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A	
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
8. WELL NAME and NUMBER: NBU 1022-3N4BS	
9. API NUMBER: 43047501670000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 PHONE NUMBER: 720 929-6511	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1498 FSL 1998 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 03 Township: 10.0S Range: 22.0E Meridian: S	
COUNTY: UINTAH	
STATE: UTAH	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 11/20/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
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	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 11/20/2013. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 November 27, 2013

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 11/27/2013	

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.
UTU01191

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

2. Name of Operator: KERR-MCGEE OIL AND GAS ONSHORE
 Contact: KAY KELLY
 Email: kay.kelly@anadarko.com

3. Address: P.O. BOX 173779
 DENVER, CO 82017
 3a. Phone No. (include area code)
 Ph: 720-929-6000

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
 At surface NESW 1498FSL 1998FWL 39.974838 N Lat, 109.428302 W Lon
 At top prod interval reported below SESW 601FSL 2154FWL
 At total depth SESW 584FSL 2170FWL

6. If Indian, Allottee or Tribe Name
 7. Unit or CA Agreement Name and No.
 UTU63047A

8. Lease Name and Well No.
 NBU 1022-3N4BS

9. API Well No.
 43-047-50167

10. Field and Pool, or Exploratory
 NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey
 or Area Sec 3 T10S R22E Mer SLB

12. County or Parish
 Uintah

13. State
 UT

14. Date Spudded
 05/16/2013

15. Date T.D. Reached
 08/28/2013

16. Date Completed
 D & A Ready to Prod.
 11/20/2013

17. Elevations (DF, KB, RT, GL)*
 5216 KB

18. Total Depth: MD 8940
 TVD 8807

19. Plug Back T.D.: MD 8885
 TVD 8752

20. Depth Bridge Plug Set: MD
 TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
 RADIAL CBL/GR/CCL/INCLINOMETER

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

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 Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 J-55	28.0	18	2541		550		0	
7.875	4.500 I-80	11.6	18	8932		1540		1170	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	8359							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	6844	8847	6844 TO 8847	0.360	237	OPEN
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
6844 TO 8847	PUMP 9,666 BBL SLICKWATER AND 169,329 LBS 30/50 MESH 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
11/20/2013	11/28/2013	24	→	0.0	2342.0	0.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	SI 1453	1827.0	→	0	2342	0		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.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	SI		→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #230030 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

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(Sold, used for fuel, vented, etc.)
SOLD

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
				GREEN RIVER BIRD'S NEST MAHOGANY WASATCH MESAVERDE	1144 1577 2056 4491 6828

32. Additional remarks (include plugging procedure):

The first 210 ft. of the surface hole was drilled with a 12 ? in. bit. The remainder of surface hole was drilled with an 11 in. bit. DQX csg was run from surface to 4952 ft.; LTC csg was run from 4952 ft. to 8932 ft. Attached is the chronological well history, perforation report & final survey.

33. Circle enclosed attachments:

- 1. Electrical/Mechanical Logs (1 full set req'd)
- 2. Geologic Report
- 3. DST Report
- 4. Directional Survey
- 5. Sundry Notice for plugging and cement verification
- 6. Core Analysis
- 7 Other:

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

**Electronic Submission #230030 Verified by the BLM Well Information System.
For KERR-MCGEE OIL AND GAS ONSHORE, sent to the Vernal**

Name (please print) KAY KELLY Title SR STAFF REGULATORY SPECIALIST

Signature _____ (Electronic Submission) Date 12/19/2013

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

RECEIVED: Dec. 19, 2013

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-3N4BS YELLOW				Spud Date: 6/29/2013				
Project: UTAH-UINTAH			Site: NBU 1022-03K PAD			Rig Name No: PROPETRO 12/12, SST 57/57		
Event: DRILLING			Start Date: 6/29/2013			End Date: 8/29/2013		
Active Datum: RKB @5,216.00usft (above Mean Sea Level)				UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0				

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
6/29/2013	10:30 - 12:30	2.00	MIRU	01	B	P	58	SKID RIG 20' RIG UP DIVERTER & FLOW LINE. SPOT RIG MAT OVER WELL. SPOT RIG OVER WELL. SET CAT WALK & PIPE RACKS. HOOK UP AND PRIME PUMP.
	12:30 - 13:00	0.50	MIRU	23		P	58	PRE SPUD JOB SAFETY MEETING WITH RIG CREW, NOV CREW, AND SCIENTIFIC CREW. REVIEW DIRECTIONAL PLANS WITH DIRECTIONAL DRILLERS PRIOR TO SPUD.
	13:00 - 13:30	0.50	DRLSUR	06	A	P	58	PICK UP 12 1/4" BIT & 8" MUD MOTOR. TRIP IN HOLE.
	13:30 - 14:30	1.00	DRLSUR	02	B	P	58	DRILL 12.25" SURFACE HOLE F/ 44'- T/ 210' BIT ROP= 166' @ 166 FPH WOB= 5-15K. RPM= TOP DRIVE~55 / MOTOR ~83 / TOTAL RPM~138 PUMPING 491 GPM @ 120 SPM STAND PIPE PRESSURE ON/OFF BOTTOM = 800/600 TORQUE ON/OFF BOTTOM = 2,700/700 UP/DN/ROT = 22/20/20 NOV ON LINE MUD WT = 8.4
	14:30 - 15:00	0.50	DRLSUR	06	A	P	224	TRIP OUT OF HOLE. LAY DOWN 12 1/4" BIT
	15:00 - 16:30	1.50	DRLSUR	06	A	P	224	PICK UP 11" BIT & DIRECTIONAL ASSEMBLY, SCRIBE. TRIP IN HOLE
	16:30 - 0:00	7.50	DRLSUR	02	B	P	224	DRILL 11". SURFACE HOLE, F/ 210' - T/ 1,250', 1040' @ 138.6 FPH WEIGHT ON BIT 18-25 K. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. PUMPING 491 GALLON PER MINUTE AT 120 STROKES PER MINUTES. PUMP PRESSURE ON/OFF(BOTTOM) 1,060/820 TORQUE ON OFF = 2,700/1,000 UP/DOWN/ ROT 61/54/57 K. DRAG 4 K. NOV ON LINE MUD WT 8.4 SLID 103' = 9.9% 6.0' ABOVE & 1.0' LEFT OF THE LINE HOLE ISSUES= NONE
6/30/2013	0:00 - 6:00	6.00	DRLSUR	02	B	P	1264	DRILL 11". SURFACE HOLE, F/ 1,250' - T/ 1,760', 510' @ 85 FPH WEIGHT ON BIT 18-25 K. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. PUMPING 491 GALLON PER MINUTE AT 120 STROKES PER MINUTES. PUMP PRESSURE ON/OFF(BOTTOM) 1,060/820 TORQUE ON OFF = 3,000/1,500 UP/DOWN/ ROT 71/60/67 K. DRAG 4 K. NOV ON LINE MUD WT 8.4 SLID 95' = 26% 6.0' ABOVE / 1.0' LEFT HOLE ISSUES: LOST CIRC @ 1,700'

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW

Spud Date: 6/29/2013

Project: UTAH-UINTAH

Site: NBU 1022-03K PAD

Rig Name No: PROPETRO 12/12, SST 57/57

Event: DRILLING

Start Date: 6/29/2013

End Date: 8/29/2013

Active Datum: RKB @5,216.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 15:30	9.50	DRLSUR	02	B	P	1774	DRILL 11". SURFACE HOLE, F/ 1,760' - T/ 2,556', 796' @ 83.7 FPH WEIGHT ON BIT 18-25 K. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. PUMPING 491 GALLON PER MINUTE AT 120 STROKES PER MINUTES. PUMP PRESSURE ON/OFF(BOTTOM) 1,270/1100 TORQUE ON OFF = 3,100/1,600 UP/DOWN/ ROT 85/62/75 K. DRAG 10 K. NOV ON LINE MUD WT 8.4 SLID 240' = 30.1% 2.0' BELOW / 2.0' LEFT HOLE ISSUES: LOST CIRC @ 1,700'
	15:30 - 18:00	2.50	DRLSUR	05	C	P	2570	CIRCULATE AND CONDITION HOLE / PUMPING 491 GPM @ 120 SPM / RETURNS CLEAN COMING OVER SHAKERS / MUD TANKS 1/2 FULL / 2 - 400 BBL UPRIGHT STORAGE TANKS FULL 4 - 400 BBL UPRIGHT STORAGE TANKS EMPTY
	18:00 - 21:30	3.50	DRLSUR	06	D	P	2570	LAY DOWN DRILL PIPE & BHA
	21:30 - 22:00	0.50	DRLSUR	12	A	P	2570	PRE JOB SAFETY MEETING WITH PRO PETRO RIG CREW . MOVE PIPE RACKS AND CATWALK. RIG UP TO RUN SURFACE CASING. CLEAR UNRELATED TOOLS.
	22:00 - 0:00	2.00	DRLSUR	12	C	P	2570	RAN 57 JOINTS (2,526.5') OF 8-5/8", 28#, J-55, LT&C CASING WITH TOPCO FLOAT GUIDE SHOE AND BAFFLE PLATE LOCATED 1 JOINT ABOVE SHOE. 5 CENTRALIZERS SPACED 10' ABOVE SHOE, 2ND & 3RD COLLARS AND EVERY THIRD COLLAR TO 2,170'. LANDED SHOE @ 2,526.5' KB. BAFFLE PLATE @ 2,480' KB.

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW			Spud Date: 6/29/2013		
Project: UTAH-UINTAH		Site: NBU 1022-03K PAD		Rig Name No: PROPETRO 12/12, SST 57/57	
Event: DRILLING		Start Date: 6/29/2013		End Date: 8/29/2013	
Active Datum: RKB @5,216.00usft (above Mean Sea Level)			UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/1/2013	0:00 - 4:30	4.50	DRLSUR	12	E	P	2570	<p>CEMENT JOB SAFETY MEETING WITH PRO PETRO CEMENTERS.</p> <p>RAN 200' OF 1". PIPE DOWN BACK-SIDE OF CASING.</p> <p>PRESSURE TEST LINES TO 2000 PSI.</p> <p>PUMP 145 BBLS OF WATER AHEAD CLEARING SHOE.</p> <p>MIX AND PUMP 20 BBLS OF GEL WATER FLUSH AHEAD OF CEMENT.</p> <p>MIX AND PUMP 300 SX OF PREMIUM CEMENT WITH 2% CACL2 & 0.25 LB/SX FLOCELE. 61.4 BBLS MIXED @ 15.8 PPG WITH YIELD OF 1.15 CF/SX.</p> <p>DROP PLUG ON FLY,</p> <p>DISPLACE WITH 145.0 BBLS OUT OF 154.7 BBLS (ACTED LIKE CEMENT BRIDGED OFF IN ANNULLUS) OF FRESH WATER. NO RETURNS THROUGH OUT JOB, FINAL LIFT OF 300 PSI AT 6 BBL/MINUTE. PLUG SHOULD BE @ 2350'</p> <p>PRESSURED UP TO 1000 PSI, BLEED OFF AND STAGED PRESSURES UP IN 250 PSI INCREMENTS TO 2000 PSI. HELD @ 2000 PSI FOR 5 MINS WITHOUT BLEED OFF.</p> <p>TESTED FLOAT AND FLOAT HELD.</p> <p>RELEASE RIG @ 04:30, 7/01/2013</p> <p>TOP JOB # 1: PUMP CEMENT DOWN ONE INCH PIPE WITH 150 SX PREMIUM CEMENT WITH 4% CACL2, 3% GR-3, & .25 LB/SX FLOCELE, 30.7 BBLS MIXED AT 15.8 PPG WITH YIELD OF 1.15 CF/SX. NO CEMENT RETURNS TO SURFACE.</p> <p>WAIT ON CEMENT 2.0 HOURS.</p> <p>TOP JOB # 2: CEMENT DOWN BACKSIDE WITH 100 SX PREMIUM CEMENT WITH 4% CACL2, 2% GR-3, & .25 LB/SX FLOCELE, 20.4 BBLS MIXED AT 15.8 PPG WITH YIELD OF 1.15 CF/SX.</p> <p>1 BBLS CEMENT RETURNS TO SURFACE. CEMENT HELD AT SURFACE</p> <p>RIG DOWN PRO PETRO CEMENTERS.</p> <p>CEMENT JOB FINISHED @ 05:30 7/01/2013</p>
8/24/2013	21:00 - 22:00	1.00	RDMO	01	C	P		RIG DOWN - SKID RIG - RIG UP
	22:00 - 0:00	2.00	CSGSUR	14	A	P		NIPPLE UP BOP'S - CHOKE & KILL LINES / ROTATING HEAD - CHANGE BALES & ELEVATORS
8/25/2013	0:00 - 4:00	4.00	CSGSUR	15	A	P		<p>HOLD SAFETY MEETING, RUN TEST ASSY, TEST BOP WITH A-1 TESTERS - TEST ANNULAR TO 250 PSI LOW/ 5 MIN 2500 PSI HIGH 10 MIN, PIPE & BLIND RAMS, FLOOR VALVES, IBOP, HCR VALVE, KILL LINE VALVES, TEST BOP'S, CHOKE MANIFOLD TO 250 PSI LOW/ 5 MIN - 5000 PSI HIGH 10 MIN, HOLD ACCUMULATOR FUNCTION TEST, TEST CSG 1500 PSI - 30 MIN, RIG DOWN</p>
	4:00 - 5:00	1.00	CSGSUR	09	A	P		SLIP & CUT 105' OF DRILLING LINE
	5:00 - 5:30	0.50	CSGSUR	14	B	P		INSTALL WEAR BUSHING

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW

Spud Date: 6/29/2013

Project: UTAH-UINTAH

Site: NBU 1022-03K PAD

Rig Name No: PROPETRO 12/12, SST 57/57

Event: DRILLING

Start Date: 6/29/2013

End Date: 8/29/2013

Active Datum: RKB @5,216.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	5:30 - 6:00	0.50	CSGSUR	06	J	P		PICK UP SCIENTIFIC 6 1/2", 1.5 BEND, HR, 7/8 LOBE, 6.4 STAGE 0.22 RPG MUD MOTOR, (SER #6496-114) - MAKE UP SMITH MDI616 PDC BIT, DRESSED WITH 6 X 15 JETS, (TFA = 1.035), SER #JH3263 - INSTALL MWD TOOL, ORIENT & SCRIBE TOOLS
	6:00 - 7:00	1.00	CSGSUR	06	A	P		TIH TO TOC AT 2260' / INSTALL ROTATING RUBBER
	7:00 - 9:30	2.50	CSGSUR	02	F	P		DRILL CEMENT & FLOAT EQUIPMENT, CLEAN OUT TO 2570' - DRILLED 280' OF CEMENT
	9:30 - 15:00	5.50	DRLPRL	02	D	P	2570	DIR DRILL FROM 2570' TO 3213' = 643' = 116.9 FPH 18-25K ON BIT 105 SPM = 515 GPM - MOTOR = 113 RPM 40-60 RPM ON TOP DRIVE 4-8K FT/LBS TORQUE 1500 PSI ON BTM - 1000 PSI OFF BTM P/U = 130K - SO = 80K - ROT = 110K HOLE IN GOOD SHAPE SLIDE 51% OF TIME & 34% OF FOOTAGE BOS DEWATERING - RUNNING CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WT = 8.5 - VIS = 27
	15:00 - 15:30	0.50	DRLPRL	07	A	P		LUBRICATE RIG
	15:30 - 0:00	8.50	DRLPRL	02	D	P	3213	DIR DRILL FROM 3213' TO 4555' = 1342' = 157.9 FPH 18-25K ON BIT 105 SPM = 515 GPM - MOTOR = 113 RPM 40-60 RPM ON TOP DRIVE 6-10K FT/LBS TORQUE 1600 PSI ON BTM - 1150 PSI OFF BTM P/U = 130K - SO = 80K - ROT = 110K HOLE IN GOOD SHAPE SLIDE 14% OF TIME & 13% OF FOOTAGE BOS DEWATERING - RUNNING CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WT = 8.5 - VIS = 27
8/26/2013	0:00 - 8:00	8.00	DRLPRV	02	D	P	4555	DIR DRILL FROM 4555' TO 5271' = 716' = 89.5 FPH 20-28K ON BIT 105 SPM = 515 GPM - MOTOR = 113 RPM 40-60 RPM ON TOP DRIVE 6-10K FT/LBS TORQUE 1600 PSI ON BTM - 1150 PSI OFF BTM P/U = 160K - SO = 100K - ROT = 135K HOLE IN GOOD SHAPE SLIDE 8% OF TIME & 5% OF FOOTAGE BOS DEWATERING - RUNNING CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WT = 8.5 - VIS = 30 LIGHT MUD UP @ 5000' BIT & MUD MOTOR NOT DRILLING TO NORMAL ROP
	8:00 - 8:30	0.50	DRLPRV	05	A	P		CONDITION MUD & CIRCULATE - PREPARE FOR BIT TRIP
	8:30 - 11:00	2.50	DRLPRV	06	A	P		***TRIP OUT FOR BIT & MUD MOTOR - HOLE IN GOOD SHAPE

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW

Spud Date: 6/29/2013

Project: UTAH-UINTAH

Site: NBU 1022-03K PAD

Rig Name No: PROPETRO 12/12, SST 57/57

Event: DRILLING

Start Date: 6/29/2013

End Date: 8/29/2013

Active Datum: RKB @5,216.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	11:00 - 12:00	1.00	DRLPRV	06	J	P		CHANGE OUT BIT & MUD MOTOR - SCRIBE DIRECTIONAL TOOLS
	12:00 - 14:00	2.00	DRLPRV	06	A	P		TRIP IN HOLE - BREAK CIRCULATION @ CASING SHOE - WASH LAST 150' TO BTM
	14:00 - 16:30	2.50	DRLPRV	02	D	P	5271	DIR DRILL FROM 5271' TO 5590' = 319' = 127.6 FPH 20-25K ON BIT 105 SPM = 515 GPM - MOTOR = 113 RPM 40-60 RPM ON TOP DRIVE 6-12K FT/LBS TORQUE 1600 PSI ON BTM - 1150 PSI OFF BTM P/U = 190K - SO = 120K - ROT = 150K HOLE IN GOOD SHAPE BOS DEWATERING - RUNNING CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WT = 8.8 - VIS = 32
	16:30 - 17:00	0.50	DRLPRV	07	A	P		LUBRICATE RIG
	17:00 - 0:00	7.00	DRLPRV	02	D	P	5590	DIR DRILL FROM 5590' TO 6333' = 743' = 106.1 FPH 20-25K ON BIT 105 SPM = 515 GPM - MOTOR = 113 RPM 40-60 RPM ON TOP DRIVE 6-13K FT/LBS TORQUE 1700 PSI ON BTM - 1250 PSI OFF BTM P/U = 220K - SO = 120K - ROT = 170K HOLE IN GOOD SHAPE BOS DEWATERING - OFF CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WT = 8.8 - VIS = 32
8/27/2013	0:00 - 8:00	8.00	DRLPRV	02	D	P	6333	DIR DRILL FROM 6333' TO 6923' = 590' = 73.75 FPH 20-25K ON BIT 105 SPM = 515 GPM - MOTOR = 113 RPM 40-60 RPM ON TOP DRIVE 6-13K FT/LBS TORQUE 1700 PSI ON BTM - 1250 PSI OFF BTM P/U = 245K - SO = 130K - ROT = 172K HOLE IN GOOD SHAPE BOS DEWATERING - OFF CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WT = 9.1 - VIS = 32
	8:00 - 17:30	9.50	DRLPRV	02	D	P	6923	DIR DRILL FROM 6923' TO 7590' = 667' = 70.2 FPH 20-25K ON BIT 105 SPM = 515 GPM - MOTOR = 113 RPM 40-60 RPM ON TOP DRIVE 10-15K FT/LBS TORQUE 1800 PSI ON BTM - 1350 PSI OFF BTM P/U = 270K - SO = 150K - ROT = 185K SLIDE 20% OF TIME & 8% OF FOOTAGE HOLE IN GOOD SHAPE BOS DEWATERING - OFF CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WT = 9.2 - VIS = 33
	17:30 - 18:00	0.50	DRLPRV	07	A	P		LUBRICATE RIG

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW

Spud Date: 6/29/2013

Project: UTAH-UINTAH

Site: NBU 1022-03K PAD

Rig Name No: PROPETRO 12/12, SST 57/57

Event: DRILLING

Start Date: 6/29/2013

End Date: 8/29/2013

Active Datum: RKB @5,216.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	18:00 - 0:00	6.00	DRLPRV	02	D	P	7590	DIR DRILL FROM 7590' TO 8058' = 468' = 78 FPH 20-25K ON BIT 105 SPM = 515 GPM - MOTOR = 113 RPM 40-60 RPM ON TOP DRIVE 10-16K FT/LBS TORQUE 1800 PSI ON BTM - 1350 PSI OFF BTM P/U = 275K - SO = 150K - ROT = 193K HOLE IN GOOD SHAPE BOS DEWATERING - OFF CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WT = 9.2 - VIS = 33
8/28/2013	0:00 - 6:00	6.00	DRLPRV	02	D	P	8058	DIRECTIONAL DRILL FROM/8,058' TO/8,352' = 294' = 49' PER HOUR. 20-25K WEIGHT ON BIT 105 SPM = 515 GPM - MOTOR = 113 RPM 40-60 RPM ON TOP DRIVE 10-16K FT/LBS TORQUE 1800 PSI ON BTM - 1350 PSI OFF BTM P/U = 275K - SO = 150K - ROT = 193K HOLE IN GOOD SHAPE BOS DEWATERING - OFF CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WT = 9.2 - VIS = 33
	6:00 - 12:00	6.00	DRLPRO	02	B	P	8352	DIRECTIONAL DRILL FROM/8,352' TO/8,654' = 302' = 50' PER HOUR 18-24K WEIGHT ON BIT 105 STROKES PER MINUTE = 515 GALLONS PER MINUTE MOTOR = 113 RPM, 40-60 RPM ON TOP DRIVE, TOTAL RPM=148-168 12-14K FT/LBS TORQUE 2400 PSI ON BOTTOM - 2000 PSI OFF BOTTOM PICK UP = 260K - SLACK OFF = 180K - ROTATING = 220K HOLE IN GOOD SHAPE SLIDE 0% OF TIME & 0% OF FOOTAGE BOS DEWATERING - RUNNING CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WEIGHT = 10.7 - VISCOSITY = 39

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW

Spud Date: 6/29/2013

Project: UTAH-UINTAH

Site: NBU 1022-03K PAD

Rig Name No: PROPETRO 12/12, SST 57/57

Event: DRILLING

Start Date: 6/29/2013

End Date: 8/29/2013

Active Datum: RKB @5,216.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	12:00 - 15:00	3.00	DRLPRO	02	B	P	8654	DIRECTIONAL DRILL FROM/8,654' TO/8,827' = 173' = 57' PER HOUR 18-24K WEIGHT ON BIT 105 STROKES PER MINUTE = 515 GALLONS PER MINUTE MOTOR = 113 RPM, 40-60 RPM ON TOP DRIVE, TOTAL RPM=148-168 12-14K FT/LBS TORQUE 2600 PSI ON BOTTOM - 2200 PSI OFF BOTTOM PICK UP = 280K - SLACK OFF = 200K - ROTATING = 240K HOLE IN GOOD SHAPE SLIDE 0% OF TIME & 0% OF FOOTAGE BOS DEWATERING - RUNNING CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WEIGHT = 10.7 - VISCOSITY = 39
	15:00 - 15:30	0.50	DRLPRO	07	A	P	8827	RIG SERVICE, LUBRICATE RIG, GREASE TOP DRIVE & DRAWWORKS, INSPECT BRAKE LINKAGE AND DRAW WORKS
	15:30 - 18:30	3.00	DRLPRO	02	B	P	8827	DIRECTIONAL DRILL FROM/8,827' TO/8,940' = 113' = 37' PER HOUR TD@ 08/28/2013 18:30 18-24K WEIGHT ON BIT 105 STROKES PER MINUTE = 515 GALLONS PER MINUTE MOTOR = 113 RPM, 40-60 RPM ON TOP DRIVE, TOTAL RPM=148-168 12-14K FT/LBS TORQUE 2600 PSI ON BOTTOM - 2200 PSI OFF BOTTOM PICK UP = 280K - SLACK OFF = 200K - ROTATING = 240K HOLE IN GOOD SHAPE SLIDE 0% OF TIME & 0% OF FOOTAGE BOS DEWATERING - RUNNING CENTRIFUGE - RUNNING MUD CLEANER - RUNNING MUD WEIGHT = 11.8 - VISCOSITY = 45
	18:30 - 20:30	2.00	DRLPRO	05	A	P	8940	CONDITION MUD & CIRCULATE, WORKING DRILL STRING UP AND DOWN, MUD IN 11.8 PPG VISCOSITY=45, MUD OUT 11.8 PPG VISCOSITY=45, MUD COMING OVER SHAKERS IS CLEAN, PUMP 50 BBL LCM SWEEP AROUND BUILD 40 BBL 13.8# DRY JOB CIRCULATE WITH NO GAINS AND NO LOSSES NO FLOW ON FLOW CHECKS
	20:30 - 22:30	2.00	DRLPRO	06	E	P	8940	20 STAND WIPER TRIP WIPER TRIP OUT OF HOLE, PUMP 40 BBL DRY JOB, BLOW DOWN TOP DRIVE, STRAIGHT PULL OFF BTM @ 320K - NO TIGHT HOLE HOLE TOOK PROPER FILL WITH NO GAINS NO LOSSES NO FLOW ON FLOW CHECKS

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW

Spud Date: 6/29/2013

Project: UTAH-UINTAH

Site: NBU 1022-03K PAD

Rig Name No: PROPETRO 12/12, SST 57/57

Event: DRILLING

Start Date: 6/29/2013

End Date: 8/29/2013

Active Datum: RKB @5,216.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	22:30 - 0:00	1.50	DRLPRO	05	A	P	8940	CONDITION MUD & CIRCULATE, WORKING DRILL STRING UP AND DOWN, MUD IN 11.8 PPG VISCOSITY=45, MUD OUT 11.8 PPG VISCOSITY=45, MUD COMING OVER SHAKERS IS CLEAN, PUMP 50 BBL LCM SWEEP AROUND - BUILD 40 BBL 13.8# DRY JOB
8/29/2013	0:00 - 4:00	4.00	DRLPRO	06	D	P	8940	CIRCULATE @ 490 GPM WITH 2400 PSI, NO GAIN NO LOSSES, NO FLOW ON FLOW CHECKS
	4:00 - 5:00	1.00	DRLPRO	06	D	P	8940	TRIP OUT OF HOLE, PUMP 40 BBL DRY JOB, BLOW DOWN TOP DRIVE, STRAIGHT PULL OFF BTM @ 320K - NO TIGHT HOLE
	5:00 - 5:30	0.50	DRLPRO	06	D	P	8940	HOLE TOOK PROPER FILL WITH NO GAINS NO LOSSES NO FLOW ON FLOW CHECKS
	5:30 - 6:30	1.00	CSGPRO	12	A	P	8940	LAY DOWN DIRECTIONAL TOOLS, LAY DOWN MUD MOTOR, BIT NO FLOW ON FLOW CHECKS
	6:30 - 12:30	6.00	CSGPRO	12	C	P	8940	PULL WEAR BUSHING. HOLD SAFETY MEETING / RIG UP WYOMING CASING SERVICE CASING EQUIPMENT
	12:30 - 13:30	1.00	CSGPRO	05	D	P	8940	WYOMING CASING SERVICE, (INSPECT FLOAT EQUIPMENT) RIG UP TORQUE TURN, PERFORM DUMP TEST. MAKE UP 4.5" K-55 LTC WEATHERFORD FLOAT SHOE ON SHOE JOINT WITH THREAD LOCK. MAKE UP 4.5" K-55 FLOAT COLLAR WITH THREAD LOCK ON TOP OF SHOE JOINT. RUN CENTRALIZERS ON FIRST 3 JTS AND EVERY THIRD JT FOR TOTAL OF 15 CENTRALIZERS. BREAK CIRCULATION @ 50', 968', 5000'. NO PROBLEMS WITH FLOAT SHOE OR COLLAR. RUN A TOTAL OF 89 JOINTS OF 4 1/2", 11.6# HCP110, LT&C CASING + 1 MARKER JOINT MAKE UP DQX CROSS OVER JOINT AND, RUN A TOTAL OF 112 JOINTS OF 4 1/2", 11.6# HCP110/ DQX, CASING, + 1 CROSSOVER + 1 PUP JOINT RUN A TOTAL OF 204 JOINTS OF CASING TO BOTTOM WITH NO PROBLEMS SET FLOAT SHOE @ 8932.34', SET TOP FLOAT COLLAR @ 8884.98', SET TOP OF MESAVERDE MARKER JOINT @ 6741.63'
	12:30 - 13:30	1.00	CSGPRO	05	D	P	8940	CIRCULATE HOLE CLEAN RIG DOWN WYOMING CASING SERVICE CASING TOOLS HOLD SAFETY MEETING, RIG UP BJ CEMENTING EQUIPMENT

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW		Spud Date: 6/29/2013	
Project: UTAH-UINTAH		Site: NBU 1022-03K PAD	Rig Name No: PROPETRO 12/12, SST 57/57
Event: DRILLING		Start Date: 6/29/2013	End Date: 8/29/2013
Active Datum: RKB @5,216.00usft (above Mean Sea Level)		UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	13:30 - 16:00	2.50	CSGPRO	12	E	P	8940	CEMENT WITH BAKER HUGHES HOLD SAFETY MEETING TEST LINES TO 4500 PSI PUMP 25 BBLS H2O 8.3 PPG SPACER MIX & PUMP 177 BBLS LEAD CEMENT 500 SACKS WITH 5 LB / SACK KOL SEAL @ 12.5 PPG WITH 1.98 YIELD, MIX & PUMP 245 BBLS TAIL CEMENT 1040 SKS WITH 5 LBS / SACK KOL SEAL @ 14.3 PPG WITH 1.32 YIELD, WASH UP LINES DISPLACE WITH 138 BBLS H2O @ 8.3 PPG FINAL LIFT PRESSURE PRIOR TO BUMPING PLUG 1635 PSI BUMP PLUG WITH 2400 PSI GOOD RETURNS THROUGHOUT JOB - 5 BBLS SPACER BACK TO SURFACE RIG DOWN CEMENTING EQUIPMENT
	16:00 - 17:00	1.00	CSGPRO	24	A	P	8940	LAY DOWN LANDING JOINT / INSTALL & TEST PACK OFF 5000 PSI, 10 MINUTES
	17:00 - 18:00	1.00	CSGPRO	14	A	P	8940	NIPPLE DOWN BOP'S / CLEAN MUD TANKS / RELEASE RIG @ 08/29/2013 18:00 HRS

US ROCKIES REGION

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 1022-3N4BS YELLOW	Wellbore No.	OH
Well Name	NBU 1022-3N4BS	Wellbore Name	NBU 1022-3N4BS
Report No.	1	Report Date	11/4/2013
Project	UTAH-UJINTAH	Site	NBU 1022-03K PAD
Rig Name/No.		Event	COMPLETION
Start Date	10/29/2013	End Date	11/20/2013
Spud Date	6/29/2013	Active Datum	RKB @5.216.00usft (above Mean Sea Level)
UWI	NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0		

1.3 General

Contractor		Job Method		Supervisor	
Perforated Assembly		Conveyed Method			

1.4 Initial Conditions

Fluid Type	Fluid Density	Gross Interval	6,844.0 (usft)-8,847.0 (usft)	Start Date/Time	11/4/2013 12:00AM
Surface Press	Estimate Res Press	No. of Intervals	58	End Date/Time	11/4/2013 12:00AM
TVD Fluid Top	Fluid Head	Total Shots	237	Net Perforation Interval	73.00 (usft)
Hydrostatic Press	Press Difference	Avg Shot Density	3.25 (shot/ft)	Final Surface Pressure	
Balance Cond	NEUTRAL			Final Press Date	

1.5 Summary

Diameter	0.360 (in)	Carr Type /Stage No	
Misfires/ Add. Shot		Carr Size (in)	3.375
Shot Density (shot/ft)	3.00	Phasing (°)	120.00
MD Base (usft)	6,846.0	Charge Desc /Charge Manufacturer	
MD Top (usft)	6,844.0	Charge Weight (gram)	23.00
CCL-T S (usft)		Reason	PRODUCTIO
CCL@ (usft)			N

2 Intervals

2.1 Perforated Interval

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
11/4/2013 12:00AM	MESAVERDE/			6,844.0	6,846.0	3.00		0.360 (in)	EXP/	3.375	120.00		23.00	PRODUCTIO	N

US ROCKIES REGION

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
11/4/2013 12:00AM	MESAVERDE/			6,868.0	6,870.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			6,878.0	6,880.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			6,989.0	6,991.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,100.0	7,102.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,121.0	7,123.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,282.0	7,284.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,353.0	7,354.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,372.0	7,374.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,494.0	7,496.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,568.0	7,570.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,609.0	7,610.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,645.0	7,646.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,665.0	7,666.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,684.0	7,685.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,736.0	7,737.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,786.0	7,787.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,804.0	7,805.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,822.0	7,824.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,849.0	7,850.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,906.0	7,907.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,918.0	7,919.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

RECEIVED: Dec. 19, 2013

US ROCKIES REGION

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
11/4/2013 12:00AM	MESAVERDE/			7,924.0	7,925.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,933.0	7,934.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,949.0	7,950.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,975.0	7,976.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,980.0	7,982.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			7,992.0	7,994.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,010.0	8,012.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,021.0	8,022.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,063.0	8,064.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,099.0	8,100.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,106.0	8,107.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,115.0	8,116.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,129.0	8,130.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,143.0	8,144.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,154.0	8,156.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,196.0	8,197.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,211.0	8,212.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,219.0	8,220.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,231.0	8,232.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,247.0	8,248.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,264.0	8,265.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

RECEIVED: Dec. 19, 2013

US ROCKIES REGION

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc./Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
11/4/2013 12:00AM	MESAVERDE/			8,313.0	8,314.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,387.0	8,388.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,406.0	8,407.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,446.0	8,447.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,483.0	8,484.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,496.0	8,497.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,522.0	8,523.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,562.0	8,563.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,571.0	8,572.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,579.0	8,580.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,616.0	8,617.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,706.0	8,707.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,731.0	8,732.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,809.0	8,810.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/4/2013 12:00AM	MESAVERDE/			8,846.0	8,847.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

3 Plots

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-3N4BS YELLOW		Spud Date: 6/29/2013	
Project: UTAH-UINTAH	Site: NBU 1022-03K PAD	Rig Name No: MILES 2/2	
Event: COMPLETION	Start Date: 10/29/2013	End Date: 11/20/2013	
Active Datum: RKB @5,216.00usft (above Mean Sea Level)	UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
10/29/2013	10:00 - 11:00	1.00	SUBSPR	52	B	P		FILL SURFACE CSG. MIRU CAMERON QUICK TEST. PRESSURE TEST CSG & FRAC VALVES 1ST PSI TEST T/ 7000 PSI. HELD FOR 15 MIN LOST 60 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. PRESSURE TEST 8 5/8 X 4 1/2 TO 544 PSI HELD FOR 5 MIN LOST -42 PSI, BLED PSI OFF, REINSTALLED POP OFF SWIFN NO PRESSURE ON SURFACE CASING FILLED SURFACE WITH 5 BBLS H2O
10/31/2013	8:00 - 8:15	0.25	FRAC	48		P		HSM,JSA
	8:30 - 12:00	3.50	FRAC	37	C	P		MIRU CASED HOLE SOLUTION PREF STG#1
11/4/2013	7:00 - 7:20	0.33	FRAC	48		P		HSM,JSA
	7:30 - 17:30	10.00	FRAC	36	H	P		REFER TO STIMULATION PJR FOR FLUID, SAND AND CHEMICAL VOLUMES, ALL STAGES WERE PERFORATED ACCORDING TO PERF RECORD IN OPEN WELLS, ALL STAGES WERE STIMULATED TO VENDOR POST JOB REPORT. ALL PLUGS ARE HALIBURTON 8K CBPS PRESSURE TEST TO 8240 PSI HELD FOR 15 MINUTES LOST 477 PSI FRAC STG #1] WHP=1637#, BRK DN PERFS=3339#, @=4.1 BPM, INTIAL ISIP=2521#, FG=.73, FINAL ISIP=2555#, FG=.73, SET PLUG & PERFORATE STG #2 FRAC STG #2] WHP=2235#, BRK DN PERFS=4846#, @=5.3 BPM, INTIAL ISIP=2820#, FG=.77, FINAL ISIP=2783#, FG=.77,(SCREEN OUT) SET PLUG & PERFORATE STG #3 COULD NOT BREAK DOWN WILL DUMP BAIL ACID IN THE MORNING.
11/5/2013	6:30 - 6:45	0.25	FRAC	48		P		HSM,JSA

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW

Spud Date: 6/29/2013

Project: UTAH-UINTAH

Site: NBU 1022-03K PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 10/29/2013

End Date: 11/20/2013

Active Datum: RKB @5,216.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 17:00	10.00	FRAC	36	H	P		2625REFER TO STIMULATION PJR FOR FLUID, SAND AND CHEMICAL VOLUMES, ALL STAGES WERE PERFORATED ACCORDING TO PERF RECORD IN OPEN WELLS, ALL STAGES WERE STIMULATED TO VENDOR POST JOB REPORT. ALL PLUGS ARE HALIBURTON 8K CBPS FRAC STG #3] WHP=936#, BRK DN PERFS=COULD NOT GET BREAK#, @= BPM, INTIAL ISIP=#, FG=., FINAL ISIP=#, FG=.76, SET PLUG & PERFORATE STG #4 SWIFN W/O FRAC
11/6/2013	6:30 - 6:45	0.25	FRAC	48		P		HSM,JSA
	6:45 - 17:00	10.25	FRAC	36	H	P		FRAC STG #4] WHP=1839#, BRK DN PERFS=5878#, @=7.8 BPM, INTIAL ISIP=2429#, FG=.74, FINAL ISIP=2567#, FG=.76, SET PLUG PERFORATE STG #5 FRAC STG #5] WHP=1624#, BRK DN PERFS=5010#, @=4.3 BPM, INTIAL ISIP=1875#, FG=.67, FINAL ISIP=2268#, FG=.72, SET PLUG AND PERFORATE STG #6 FRAC STG #6] WHP=1839#, BRK DN PERFS=2450#, @=4.9 BPM, INTIAL ISIP=1819#, FG=.67, FINAL ISIP=2256#, FG=.72, SET PLUG AND PERFORATE STG #7 SWIFN W/O FRAC
11/7/2013	6:30 - 6:45	0.25	FRAC	48		P		HSM,JSA
	7:45 - 8:30	0.75	FRAC	36	H	P		CHANGE OUT UNION RUBBER & GROUND VALVE
	17:00 - 17:00	0.00	FRAC					FRAC STG #7] WHP=1603#, BRK DN PERFS=2732#, @=3.5 BPM, INTIAL ISIP=1653#, FG=.65, FINAL ISIP=2270#, FG=.73, SET PLUG AND PERFORATE STG #8 FRAC STG #8] WHP=945#, BRK DN PERFS=2936#, @=5.1 BPM, INTIAL ISIP=1646#, FG=.66, FINAL ISIP=2402#, FG=.76, SET PLUG AND PERFORATE STG #9 SWIFN W/O FRAC
11/8/2013	6:15 - 6:30	0.25	FRAC	48		P		HSM,JSA

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW

Spud Date: 6/29/2013

Project: UTAH-UINTAH

Site: NBU 1022-03K PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 10/29/2013

End Date: 11/20/2013

Active Datum: RKB @5,216.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:30 - 13:00	6.50	FRAC	36	H	P		FRAC STG #9] WHP=350#, BRK DN PERFS=2491#, @=4.9 BPM, INTIAL ISIP=1287#, FG=.62, FINAL ISIP=2027#, FG=.72, SET PLUG AND PERFORATE STG #10 FRAC STG #10] WHP=275#, BRK DN PERFS=1774#, @=3.8 BPM, INTIAL ISIP=1174#, FG=.61, FINAL ISIP=1717#, FG=.69, SET TOP KILL TOTAL BBLS=9,666 TOTAL SAND=169,329
11/19/2013	7:00 - 7:15	0.25	DRLOUT	48		P		HSM, SLPIS, TRIPS & FALLS, RIGGING UP, PU TBG, P/T BOP
	7:15 - 16:00	8.75	DRLOUT	31	I	P		4 OF 6, MIRU, ND WH, NU BOP, RU FLOOR & TBG EQUIP, PU 3 7/8" BIT, POBS, 1.875" XN S/N, TALLY & PU TBG TO KILL PLUG, RU P/S, FILL TBG & BREAK CIRC, P/T BOP TO 3,000 PSI, SURFACE CSG VALVE OPEN & LOCKED, D/O 3 CBP'S. C/O 30' SAND, TAG 1ST PLUG @ 6,794', KICK 0 PSI ON VACUMN, RIH, ((NO FLOW W/O PUMP)) C/O 50' SAND, TAG 2ND PLUG @ 7,021', KICK 0 PSI ON VACUMN, RIH, ((NO FLOW W/O PUMP)) C/O 30' SAND, TAG 3RD PLUG @ 7,314', KICK 400 PSI, CSG PRESS 500 PSI, D/O REMAINING 7 CBP'S THRU THE BIG JIM DANDY & HAL 9000 IN AM, LET WELL CLEAN UP FOR 30 MIN, SWI, DRAIN & WINTERIZE EQUIP, SDFN.
11/20/2013	7:00 - 7:15	0.25	DRLOUT	48		P		HSM, SLIPS, TRIPS & FALLS, D/O CBP'S, LANDING TBG

API Well Number: 43047501670000

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-3N4BS YELLOW		Spud Date: 6/29/2013	
Project: UTAH-UINTAH		Site: NBU 1022-03K PAD	Rig Name No: MILES 2/2
Event: COMPLETION		Start Date: 10/29/2013	End Date: 11/20/2013
Active Datum: RKB @5,216.00usft (above Mean Sea Level)		UWI: NE/SW0/10/S/22/E/3/0/0/26/PM/S/1498/W/0/1998/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								TBG RETURNED 52 JTS L-80 EOT @ 8,358.84'
								TWTR= 9,666 BBLs TWR= 3,000 BBLs TWLTR= 6,666 BBLs
	14:00 - 14:00	0.00	DRLOUT	50				WELL TURNED TO SALES @ 2000 HR ON 11/20/2013. 3000 MCFD, 1920 BWPD, FCP 2341@, FTP 1813#, 20/64" CK.

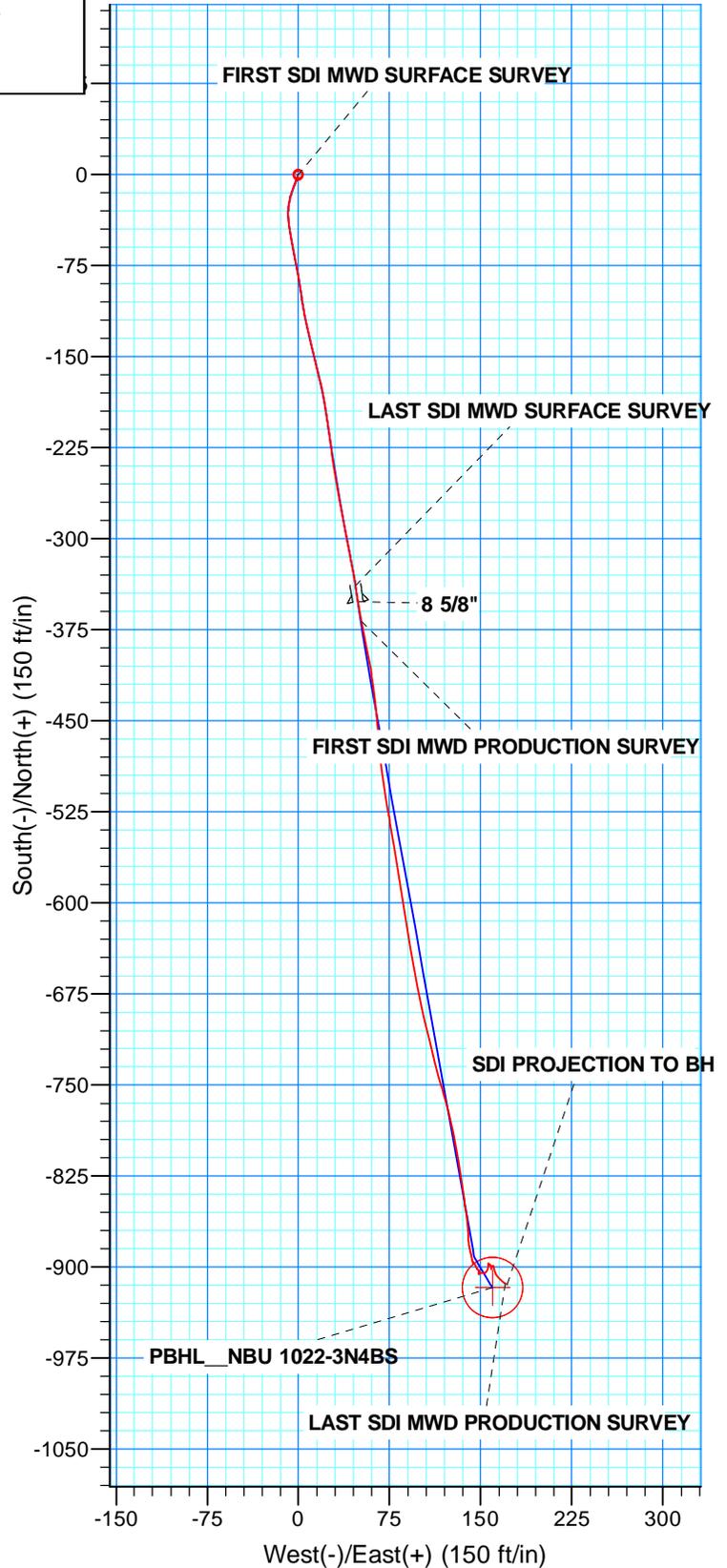
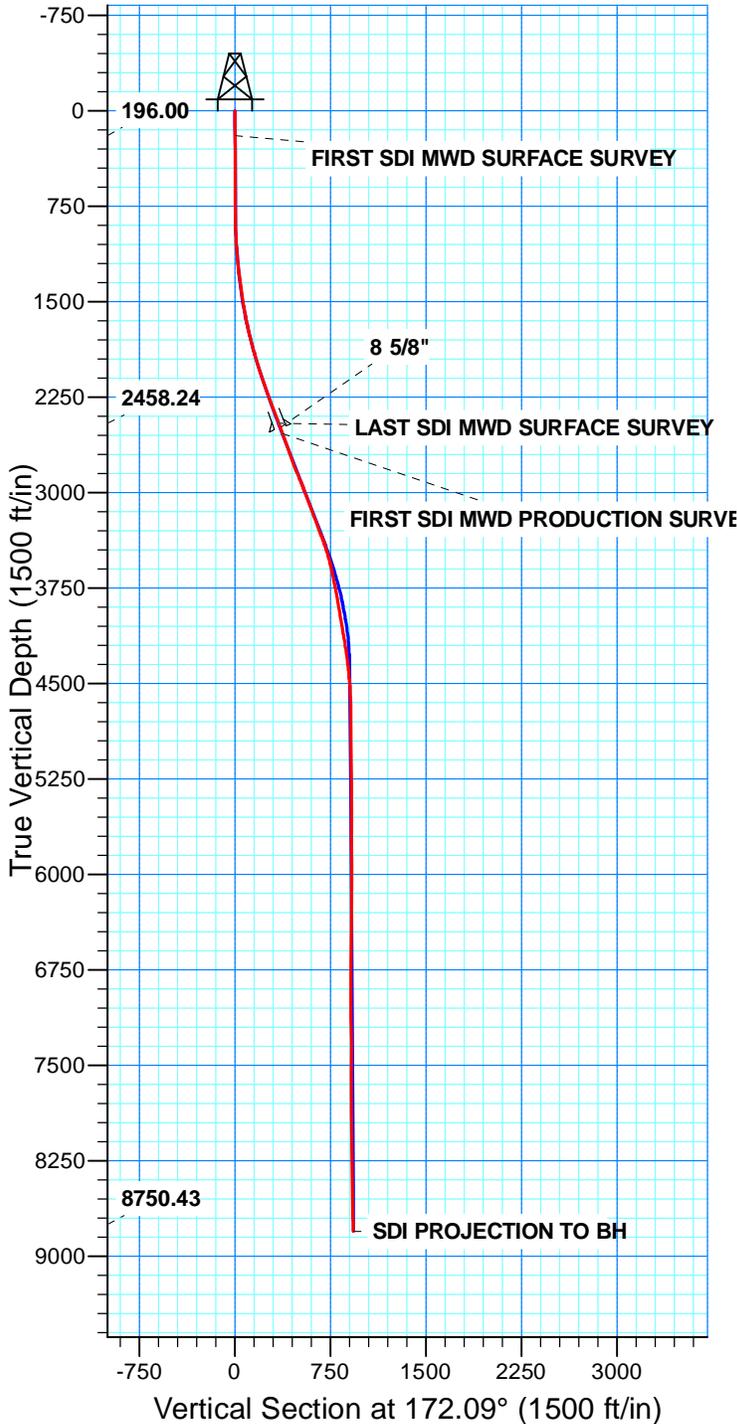


API Well Number: 43047501670000
 Project: UTAH - UTM (feet), NAD27, Zone 12N

Site: NBU 1022-3K PAD
 Well: NBU 1022-3N4BS
 Wellbore: OH



WELL DETAILS: NBU 1022-3N4BS				
GL 5198 & KB 18 @ 5216.00ft (SST 57)				
+N/-S	+E/-W	Northing	Easting	Latitude
0.00	0.00	14520778.45	2080946.16	39.9748720
		Longitude		
		-109.4276190		





US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

NBU 1022-3K PAD

NBU 1022-3N4BS

OH

Design: OH

Standard Survey Report

03 September, 2013





Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-3N4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5198 & KB 18 @ 5216.00ft (SST 57)
Site:	NBU 1022-3K PAD	MD Reference:	GL 5198 & KB 18 @ 5216.00ft (SST 57)
Well:	NBU 1022-3N4BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales Office

Project	UTAH - UTM (feet), NAD27, Zone 12N		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 1022-3K PAD, SECTION 3 T10S R22E				
Site Position:	Northing:	14,520,782.07 usft	Latitude:	39.9748810	
From:	Lat/Long	Easting:	2,080,965.71 usft	Longitude:	-109.4275490
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.01 °

Well	NBU 1022-3N4BS, 1498 FSL 1998 FWL					
Well Position	+N/-S	0.00 ft	Northing:	14,520,778.45 usft	Latitude:	39.9748720
	+E/-W	0.00 ft	Easting:	2,080,946.16 usft	Longitude:	-109.4276190
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,198.00 ft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/10/2013	10.79	65.81	52,126

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	172.09	

Survey Program	Date	9/3/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
14.00	2,504.00	Survey #1 SDI MWD SURFACE (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
2,588.00	8,940.00	Survey #2 SDI MWD PRODUCTION (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.00	0.00	0.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
196.00	0.62	211.53	196.00	-0.84	-0.51	0.76	0.34	0.34	0.00	0.00
FIRST SDI MWD SURFACE SURVEY										
282.00	0.09	99.99	281.99	-1.25	-0.69	1.14	0.77	-0.62	-129.70	
364.00	0.09	230.16	363.99	-1.30	-0.68	1.19	0.20	0.00	158.74	
453.00	0.26	210.03	452.99	-1.52	-0.83	1.39	0.20	0.19	-22.62	
543.00	0.79	147.63	542.99	-2.22	-0.60	2.12	0.79	0.59	-69.33	
633.00	0.59	120.98	632.98	-2.98	0.13	2.97	0.41	-0.22	-29.61	
723.00	0.26	313.92	722.98	-3.08	0.38	3.10	0.94	-0.37	-185.62	



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-3N4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5198 & KB 18 @ 5216.00ft (SST 57)
Site:	NBU 1022-3K PAD	MD Reference:	GL 5198 & KB 18 @ 5216.00ft (SST 57)
Well:	NBU 1022-3N4BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales Office

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
813.00	0.35	266.37	812.98	-2.96	-0.04	2.92	0.29	0.10	-52.83	
903.00	1.92	215.65	902.96	-4.20	-1.20	3.99	1.91	1.74	-56.36	
993.00	3.31	200.79	992.87	-7.85	-3.00	7.37	1.71	1.54	-16.51	
1,083.00	4.84	198.94	1,082.64	-13.87	-5.15	13.03	1.71	1.70	-2.06	
1,173.00	5.45	191.66	1,172.28	-21.65	-7.25	20.45	0.99	0.68	-8.09	
1,263.00	6.33	183.14	1,261.80	-30.79	-8.39	29.34	1.38	0.98	-9.47	
1,353.00	7.38	172.38	1,351.16	-41.47	-7.89	39.99	1.84	1.17	-11.96	
1,443.00	8.71	169.69	1,440.27	-53.91	-5.90	52.58	1.54	1.48	-2.99	
1,533.00	9.11	167.54	1,529.19	-67.57	-3.15	66.49	0.58	0.44	-2.39	
1,623.00	10.99	170.92	1,617.80	-83.00	-0.26	82.18	2.19	2.09	3.76	
1,713.00	12.79	170.86	1,705.87	-101.31	2.68	100.71	2.00	2.00	-0.07	
1,803.00	14.60	168.20	1,793.31	-122.25	6.58	121.99	2.13	2.01	-2.96	
1,893.00	15.30	166.44	1,880.26	-144.90	11.69	145.13	0.93	0.78	-1.96	
1,983.00	16.53	166.17	1,966.81	-168.87	17.53	169.68	1.37	1.37	-0.30	
2,073.00	17.94	171.33	2,052.77	-195.01	22.68	196.28	2.31	1.57	5.73	
2,163.00	19.28	172.04	2,138.06	-223.43	26.83	225.00	1.51	1.49	0.79	
2,253.00	20.22	170.48	2,222.77	-253.48	31.46	255.40	1.20	1.04	-1.73	
2,343.00	20.05	169.78	2,307.27	-284.01	36.77	286.36	0.33	-0.19	-0.78	
2,433.00	20.19	168.12	2,391.78	-314.39	42.70	317.27	0.65	0.16	-1.84	
2,504.00	21.02	171.53	2,458.24	-338.97	47.10	342.23	2.05	1.17	4.80	
LAST SDI MWD SURFACE SURVEY										
2,541.00	20.62	170.68	2,492.82	-351.97	49.13	355.38	1.36	-1.09	-2.29	
8 5/8"										
2,588.00	20.11	169.56	2,536.88	-368.08	51.94	371.72	1.36	-1.08	-2.39	
FIRST SDI MWD PRODUCTION SURVEY										
2,683.00	19.48	168.49	2,626.27	-399.66	58.06	403.85	0.77	-0.66	-1.13	
2,778.00	20.78	174.00	2,715.47	-431.95	62.98	436.50	2.42	1.37	5.80	
2,872.00	21.74	175.20	2,803.08	-465.88	66.18	470.55	1.12	1.02	1.28	
2,967.00	23.02	171.64	2,890.92	-501.79	70.35	506.70	1.96	1.35	-3.75	
3,062.00	20.62	169.71	2,979.11	-536.63	76.04	541.99	2.64	-2.53	-2.03	
3,156.00	20.91	171.58	3,067.01	-569.51	81.46	575.30	0.77	0.31	1.99	
3,252.00	20.32	170.87	3,156.86	-602.92	86.61	609.10	0.67	-0.61	-0.74	
3,347.00	20.70	170.03	3,245.84	-635.74	92.13	642.37	0.51	0.40	-0.88	
3,442.00	21.38	169.31	3,334.50	-669.29	98.25	676.45	0.77	0.72	-0.76	
3,537.00	18.25	166.71	3,423.87	-700.79	104.89	708.56	3.42	-3.29	-2.74	
3,632.00	15.90	165.97	3,514.67	-727.90	111.46	736.31	2.48	-2.47	-0.78	
3,728.00	12.11	163.59	3,607.80	-750.33	117.50	759.36	3.99	-3.95	-2.48	
3,823.00	11.26	164.59	3,700.83	-768.83	122.78	778.41	0.92	-0.89	1.05	
3,918.00	10.14	168.63	3,794.18	-785.97	126.89	795.95	1.42	-1.18	4.25	
4,013.00	9.62	170.13	3,887.77	-801.99	129.90	812.23	0.61	-0.55	1.58	
4,109.00	10.75	171.19	3,982.26	-818.74	132.65	829.20	1.19	1.18	1.10	
4,204.00	9.71	172.22	4,075.75	-835.43	135.09	846.07	1.11	-1.09	1.08	
4,298.00	8.12	170.68	4,168.61	-849.84	137.24	860.64	1.71	-1.69	-1.64	
4,394.00	7.88	175.31	4,263.68	-863.09	138.87	873.98	0.72	-0.25	4.82	



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-3N4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5198 & KB 18 @ 5216.00ft (SST 57)
Site:	NBU 1022-3K PAD	MD Reference:	GL 5198 & KB 18 @ 5216.00ft (SST 57)
Well:	NBU 1022-3N4BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales Office

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,489.00	7.48	176.02	4,357.82	-875.74	139.83	886.66	0.43	-0.42	0.75
4,584.00	4.92	166.46	4,452.26	-885.88	141.22	896.88	2.90	-2.69	-10.06
4,679.00	3.44	168.17	4,547.01	-892.63	142.76	903.78	1.56	-1.56	1.80
4,774.00	1.23	155.79	4,641.92	-896.35	143.76	907.60	2.37	-2.33	-13.03
4,869.00	0.66	121.45	4,736.91	-897.56	144.64	908.93	0.82	-0.60	-36.15
4,964.00	0.54	132.34	4,831.91	-898.15	145.44	909.62	0.17	-0.13	11.46
5,058.00	0.82	158.57	4,925.90	-899.07	146.01	910.61	0.44	0.30	27.90
5,153.00	1.14	156.51	5,020.88	-900.57	146.64	912.18	0.34	0.34	-2.17
5,248.00	0.96	129.88	5,115.87	-901.95	147.63	913.68	0.54	-0.19	-28.03
5,343.00	0.91	136.73	5,210.86	-903.01	148.75	914.89	0.13	-0.05	7.21
5,438.00	0.24	221.12	5,305.85	-903.71	149.14	915.63	0.97	-0.71	88.83
5,533.00	0.34	157.45	5,400.85	-904.12	149.12	916.04	0.33	0.11	-67.02
5,628.00	0.40	307.75	5,495.85	-904.18	148.96	916.07	0.75	0.06	158.21
5,724.00	0.37	293.49	5,591.85	-903.85	148.41	915.67	0.10	-0.03	-14.85
5,819.00	0.54	154.22	5,686.85	-904.13	148.33	915.94	0.90	0.18	-146.60
5,914.00	0.95	190.50	5,781.84	-905.31	148.38	917.11	0.64	0.43	38.19
6,009.00	0.73	39.30	5,876.84	-905.61	148.62	917.45	1.71	-0.23	-159.16
6,105.00	0.63	78.67	5,972.83	-905.03	149.52	917.00	0.49	-0.10	41.01
6,200.00	0.44	94.41	6,067.83	-904.96	150.40	917.05	0.25	-0.20	16.57
6,294.00	0.79	91.88	6,161.82	-905.01	151.41	917.23	0.37	0.37	-2.69
6,390.00	0.79	80.55	6,257.81	-904.92	152.72	917.33	0.16	0.00	-11.80
6,485.00	1.41	53.30	6,352.79	-904.12	154.30	916.75	0.84	0.65	-28.68
6,580.00	1.90	14.65	6,447.76	-901.89	155.64	914.73	1.25	0.52	-40.68
6,676.00	1.41	22.01	6,543.72	-899.26	156.48	912.24	0.56	-0.51	7.67
6,771.00	0.54	320.53	6,638.70	-897.83	156.64	910.84	1.31	-0.92	-64.72
6,866.00	0.42	350.01	6,733.70	-897.14	156.29	910.11	0.28	-0.13	31.03
6,961.00	0.12	159.92	6,828.70	-896.89	156.27	909.86	0.57	-0.32	178.85
7,056.00	0.17	120.25	6,923.70	-897.06	156.42	910.05	0.11	0.05	-41.76
7,152.00	0.64	120.23	7,019.70	-897.40	157.01	910.47	0.49	0.49	-0.02
7,247.00	1.19	157.19	7,114.68	-898.57	157.85	911.75	0.82	0.58	38.91
7,342.00	0.94	167.71	7,209.67	-900.25	158.40	913.48	0.33	-0.26	11.07
7,438.00	0.90	176.17	7,305.66	-901.77	158.62	915.02	0.15	-0.04	8.81
7,533.00	0.67	6.71	7,400.65	-901.96	158.73	915.22	1.65	-0.24	-178.38
7,628.00	0.64	17.55	7,495.65	-900.90	158.96	914.21	0.13	-0.03	11.41
7,723.00	0.44	342.55	7,590.64	-900.05	159.01	913.37	0.40	-0.21	-36.84
7,818.00	0.53	40.73	7,685.64	-899.37	159.18	912.72	0.50	0.09	61.24
7,914.00	0.44	66.92	7,781.64	-898.89	159.81	912.33	0.25	-0.09	27.28
8,009.00	0.57	144.19	7,876.63	-899.13	160.42	912.65	0.67	0.14	81.34
8,104.00	0.88	168.70	7,971.63	-900.23	160.84	913.80	0.45	0.33	25.80
8,200.00	0.69	167.22	8,067.62	-901.51	161.12	915.11	0.20	-0.20	-1.54
8,295.00	1.23	161.14	8,162.60	-903.03	161.57	916.68	0.58	0.57	-6.40
8,390.00	0.90	167.60	8,257.59	-904.73	162.06	918.42	0.37	-0.35	6.80
8,485.00	1.10	144.48	8,352.57	-906.20	162.75	919.98	0.47	0.21	-24.34



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-3N4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5198 & KB 18 @ 5216.00ft (SST 57)
Site:	NBU 1022-3K PAD	MD Reference:	GL 5198 & KB 18 @ 5216.00ft (SST 57)
Well:	NBU 1022-3N4BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales Office

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,580.00	1.23	142.56	8,447.55	-907.75	163.90	921.67	0.14	0.14	-2.02
8,675.00	1.39	132.84	8,542.53	-909.34	165.37	923.45	0.29	0.17	-10.23
8,770.00	1.78	130.05	8,637.49	-911.08	167.34	925.44	0.42	0.41	-2.94
8,865.00	1.93	124.75	8,732.44	-912.94	169.78	927.62	0.24	0.16	-5.58
8,883.00	1.93	128.18	8,750.43	-913.30	170.27	928.04	0.64	0.00	19.06
LAST SDI MWD PRODUCTION SURVEY									
8,940.00	1.93	128.18	8,807.40	-914.48	171.78	929.42	0.00	0.00	0.00
SDI PROJECTION TO BH									

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL__NBU 1022-3N4E	0.00	0.00	8,802.00	-916.73	159.73	14,519,864.69	2,081,122.03	39.9723550	-109.4270490
- actual wellpath misses target center by 12.13ft at 8934.33ft MD (8801.73 TVD, -914.37 N, 171.63 E)									
- Circle (radius 25.00)									

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,541.00	2,492.82	8 5/8"	8.625	11.000

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
196.00	196.00	-0.84	-0.51	FIRST SDI MWD SURFACE SURVEY
2,504.00	2,458.24	-338.97	47.10	LAST SDI MWD SURFACE SURVEY
2,588.00	2,536.88	-368.08	51.94	FIRST SDI MWD PRODUCTION SURVEY
8,883.00	8,750.43	-913.30	170.27	LAST SDI MWD PRODUCTION SURVEY
8,940.00	8,807.40	-914.48	171.78	SDI PROJECTION TO BH

Checked By: _____ Approved By: _____ Date: _____