

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

FORM 3

AMENDED REPORT
(highlight changes)

APPLICATION FOR PERMIT TO DRILL			5. MINERAL LEASE NO: ST ML 22798	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>			7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>			8. UNIT or CA AGREEMENT NAME: 891008900A	
2. NAME OF OPERATOR: Kerr-McGee Oil & Gas Onshore, LP			9. WELL NAME and NUMBER: NBU 1022-32D1S	
3. ADDRESS OF OPERATOR: P.O. Box 173779 CITY Denver STATE CO ZIP 80217-3779		PHONE NUMBER: (720) 929-6226	10. FIELD AND POOL, OR WILDCAT: Natural Buttes Field	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 205' FNL & 2058' FWL, Sec. 32, T10S, R22E AT PROPOSED PRODUCING ZONE: NWNW 270' FNL & 1310' FWL, Sec. 32, T10S, R22E			11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 32 10S 22E	
4. LOCATION OF WELL (FOOTAGES) <i>631222X 44189084 39.911993 -109.464765</i>				
4. LOCATION OF WELL (FOOTAGES) <i>630994X 44188814 39.911791 -109.467433</i>				
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 21.75 miles southeast of Ouray, Utah			12. COUNTY: Uintah	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 205'	16. NUMBER OF ACRES IN LEASE: 640	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 20		
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 500'	19. PROPOSED DEPTH: 8,633	20. BOND DESCRIPTION: RLB0005237		
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5449	22. APPROXIMATE DATE WORK WILL START:	23. ESTIMATED DURATION: 10 days		

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
12 1/4"	9 5/8" J-55 36#	1,800	Premium Cement	215 sx	1.18 15.6
			Premium Cement	50 sx	1.18 15.6
7 7/8"	4 1/2" I-80 11.6#	8,500	Premium Lite II	340 sx	3.38 11.0
			50/50 Poz G	1310 sx	1.31 14.3

25. **ATTACHMENTS**

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

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Kevin McIntyre TITLE Regulatory Analyst I

SIGNATURE *Kevin McIntyre* DATE 7/2/2008

(This space for State use only)

API NUMBER ASSIGNED: 43-047-40204

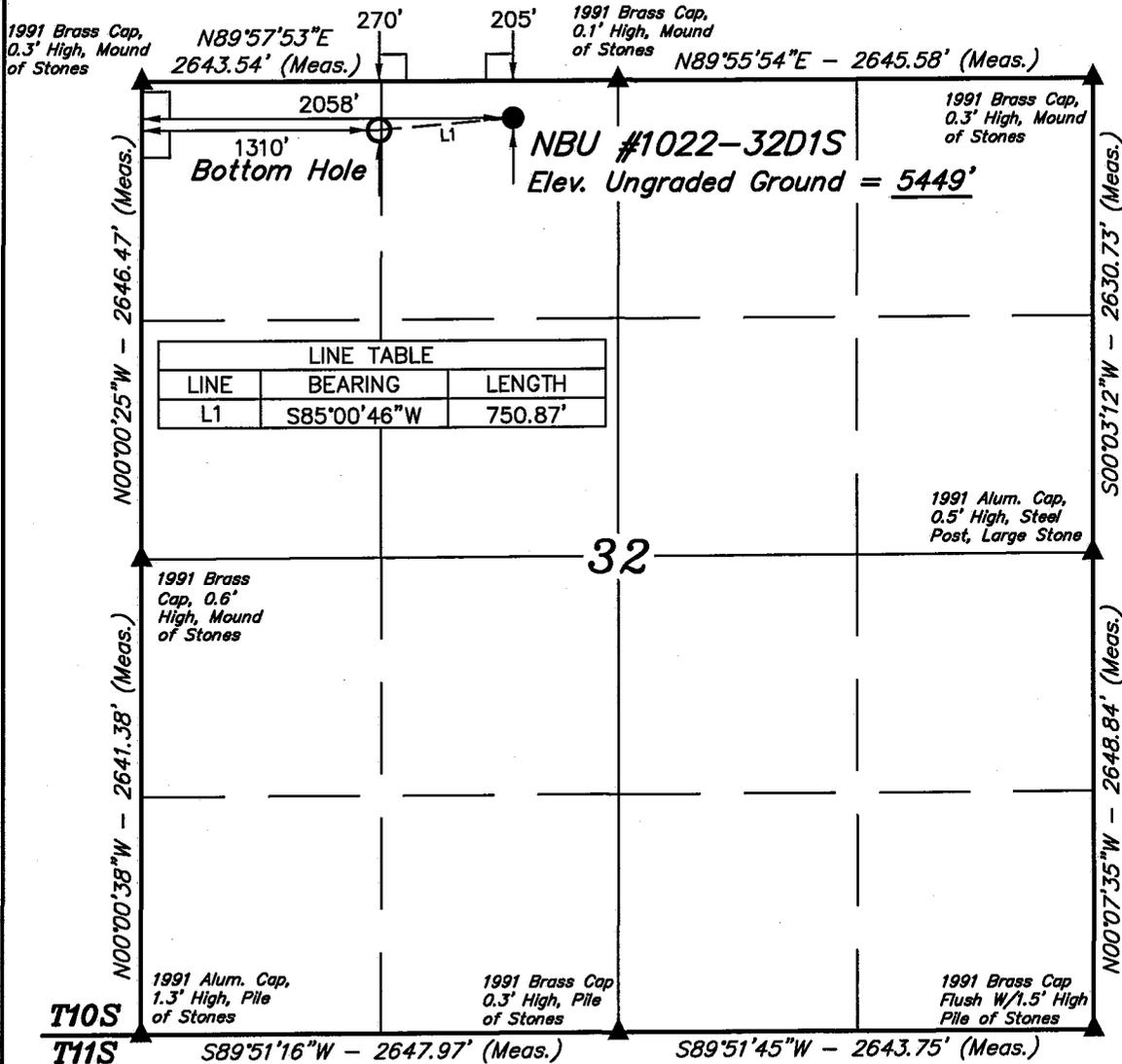
APPROVAL:
Approved by the Utah Division of Oil, Gas and Mining

Date: 7-2-08
By: *[Signature]*

RECEIVED
JUL 08 2008
DIV. OF OIL, GAS & MINING

(11/2001) (See Instructions on Reverse Side)

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



Kerr-McGee Oil & Gas Onshore LP

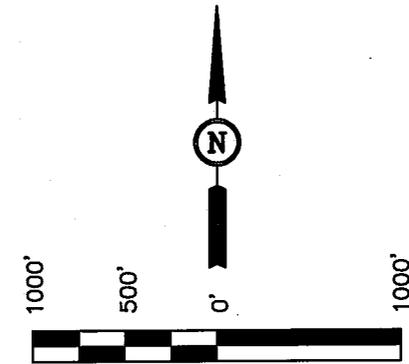
Well location, NBU #1022-32D1S, located as shown in the NE 1/4 NW 1/4 of Section 32, T10S, R22E, S.L.B.&M. Uintah County, Utah.

BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.

BASIS OF BEARINGS

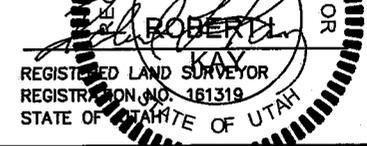
BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FOR 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

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)		NAD 83 (SURFACE LOCATION)	
LATITUDE = 39°54'42.95" (39.911931)	LONGITUDE = 109°28'05.76" (109.468267)	LATITUDE = 39°54'43.60" (39.912111)	LONGITUDE = 109°27'56.16" (109.465600)
NAD 27 (TARGET BOTTOM HOLE)		NAD 27 (SURFACE LOCATION)	
LATITUDE = 39°54'43.07" (39.911964)	LONGITUDE = 109°28'03.30" (109.467583)	LATITUDE = 39°54'43.72" (39.912144)	LONGITUDE = 109°27'53.70" (109.464917)

SCALE 1" = 1000'	DATE SURVEYED: 05-21-08	DATE DRAWN: 05-29-08
PARTY D.K. C.K. C.C.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	

**NBU 1022-32D1S
NENW Sec. 32, T10S,R22E
UINTAH COUNTY, UTAH
ST ML 22798**

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers:

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	975'
Birds Nest	1328'
Mahogany	1697'
Wasatch	4041'
Mesaverde	6499'
MVU2	7488'
MVL1	8101'
TVD	8500'
TD	8633'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	975'
Water	Birds Nest	1328'
Water	Mahogany	1697'
Gas	Wasatch	4041'
Gas	Mesaverde	6499'
Gas	MVU2	7488'
Gas	MVL1	8101'
Water	N/A	
Other Minerals	N/A	

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.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 8500' TVD, approximately equals 5270 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3400 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 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.

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.

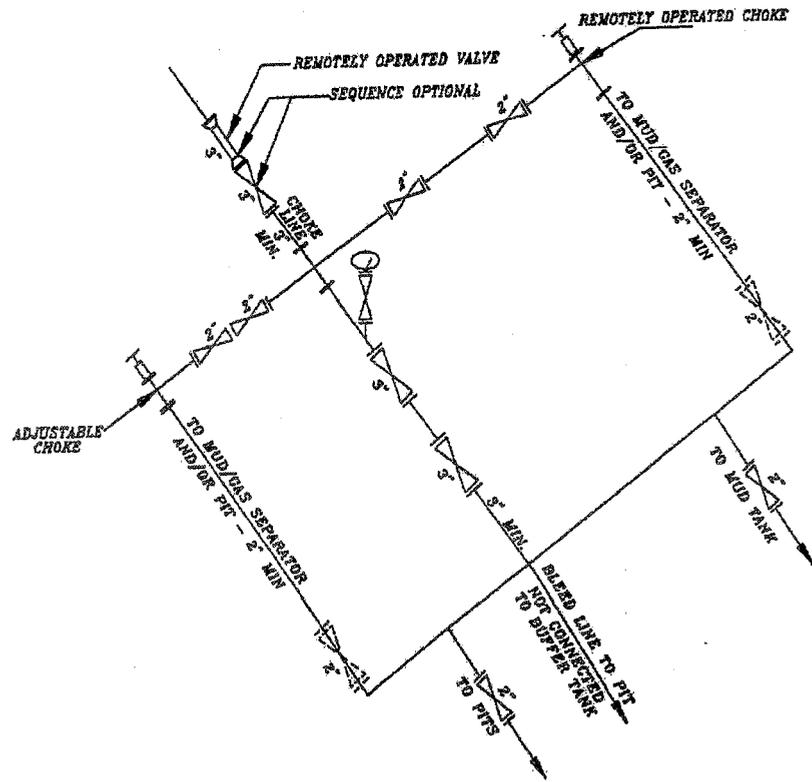
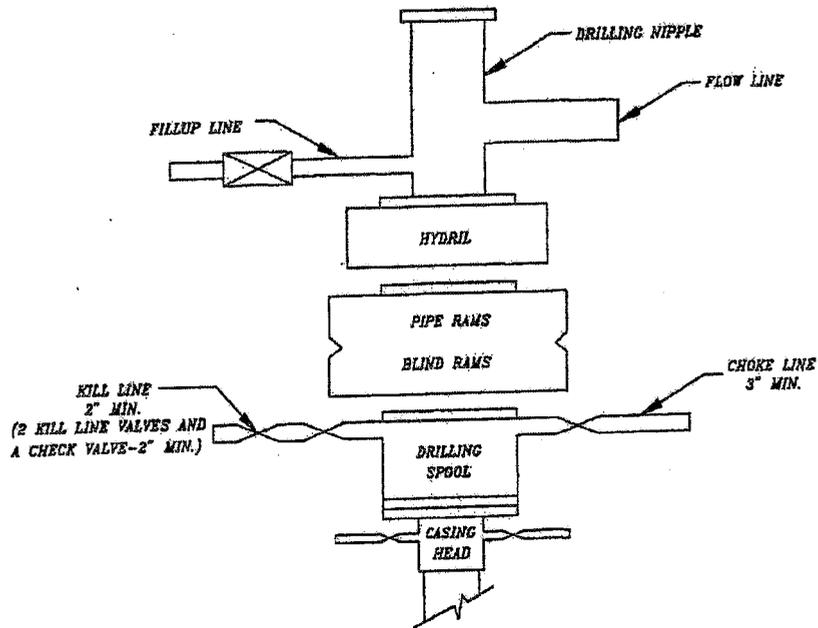
Conclusion

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 refer to the attached Drilling Program.

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

NBU 1022-32D1S
NENW SEC. 32, T10S, R22E
UINTAH COUNTY, UTAH
ST ML 22798

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

Directional Drilling:

In accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

1. **Existing Roads:**

Refer to Topo Map A for directions to the location.

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

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

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. **Planned Access Roads:**

Approximately 0.2 mi. +/- of access road re-route is proposed. Please refer to the attached Topo Map B.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

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.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

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

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities:

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain

fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

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 required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately 1,019' of 4" pipeline is proposed. Refer to Topo D for the proposed pipeline.

5. Location and Type of Water Supply:

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

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.

6. Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

7. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 20 mil thick, 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 spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

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

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.

8. **Ancillary Facilities:**

None are anticipated.

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.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner 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.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to 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 9 shall be submitted.

10. **Plans for Reclamation of the Surface:**

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

11. Surface/Mineral Ownership:

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

12. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey will be submitted when report becomes available.

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 Operators's Representative & Certification:

Kevin McIntyre
Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
P.O. Box 173779
Denver, CO 80217-3779
(720) 929-6226

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

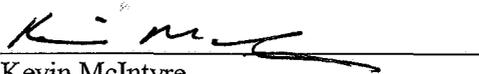
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

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 State Surety Bond #RLB0005237.

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.

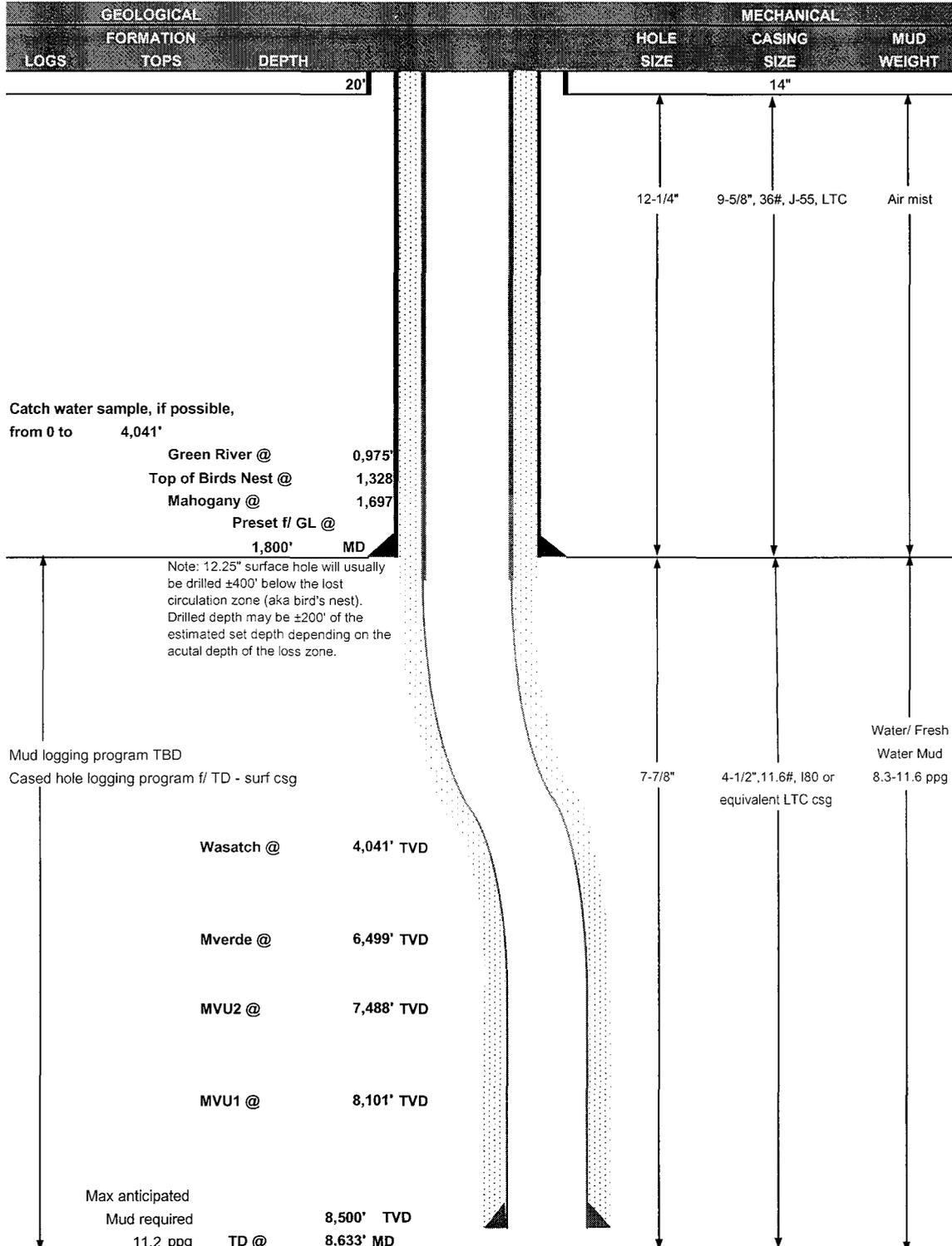

Kevin McIntyre

7/2/2008
Date



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	July 7, 2008	
WELL NAME	NBU 1022-32D1S		TD	8,500'	TVD 8,633' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah
		ELEVATION	5,449' GL	KB 5,464'	
SURFACE LOCATION	NENW 205' FNL & 2058' FWL, Sec. 32, T 10S R 22E				
	Latitude:	39.912144	Longitude:	-109.464917	NAD 27
BTM HOLE LOCATION	NWNW 270' FNL & 1310' FWL, Sec. 32, T 10S R 22E				
	Latitude:	39.911964	Longitude:	-109.467583	NAD 27
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: UDOGM (MINERALS AND SURFACE), BLM, Tri-County Health Dept.				



CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
SURFACE	9-5/8"	0 to 1800	36.00	J-55	LTC	3520	2020	453000
						1.14	2.40	8.90
PRODUCTION	4-1/2"	0 to 8500	11.60	I-80	LTC	7780	6350	201000
						2.53	1.28	2.30

- 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 = 11.2 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 3400 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE Option 2			NOTE: If well will circulate water to surface, option 2 will be utilized				
	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOW	360	35%	12.60	1.81
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,533'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	340	40%	11.00	3.38
	TAIL	5,100'	50/50 Poz/G + 10% salt + 2% gel + .1% R-3	1250	40%	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 System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____
Brad Laney

DATE: _____

DRILLING SUPERINTENDENT: _____
Randy Bayne

DATE: _____



Weatherford[®]

Drilling Services

Proposal



Anadarko Petroleum Corp.
NBU 1022-32C PAD
NBU 1022-32D1S
UINTAH COUNTY, UTAH
WELL FILE: PLAN 1
JUNE 27, 2008

Weatherford International Ltd.
2000 Oil Drive
Casper, Wyoming 82604
+1.307.265.1413 Main
+1.307.235.3958 Fax
www.weatherford.com

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	1860.00	0.00	0.00	0.00	0.00	0.00	
2	1860.00	0.00	0.00	1860.00	0.00	0.00	0.00	0.00	0.00	
3	2842.63	24.57	265.10	2812.80	-17.72	-206.69	2.50	265.10	207.45	
4	3650.12	24.57	265.10	3547.20	-46.40	-541.16	0.00	0.00	543.15	
5	4632.75	0.00	0.00	4500.00	-64.13	-747.85	2.50	180.00	750.59	
6	8632.75	0.00	0.00	8500.00	-64.13	-747.85	0.00	0.00	750.59	NBU 1022-32D1S

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape
NBU 1022-32D1S	8500.00	-65.54	-747.85	581455.74	2570047.33	39° 54' 43.070 N	109° 28' 3.299 W	Circle (Radius: 25.00)



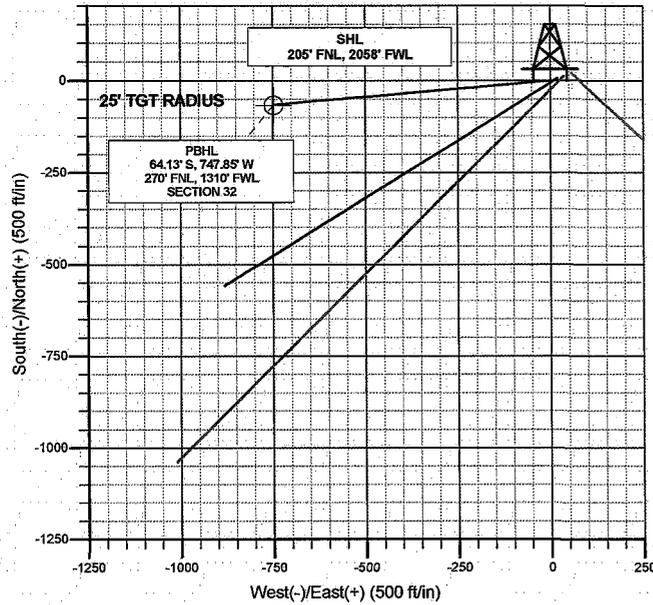
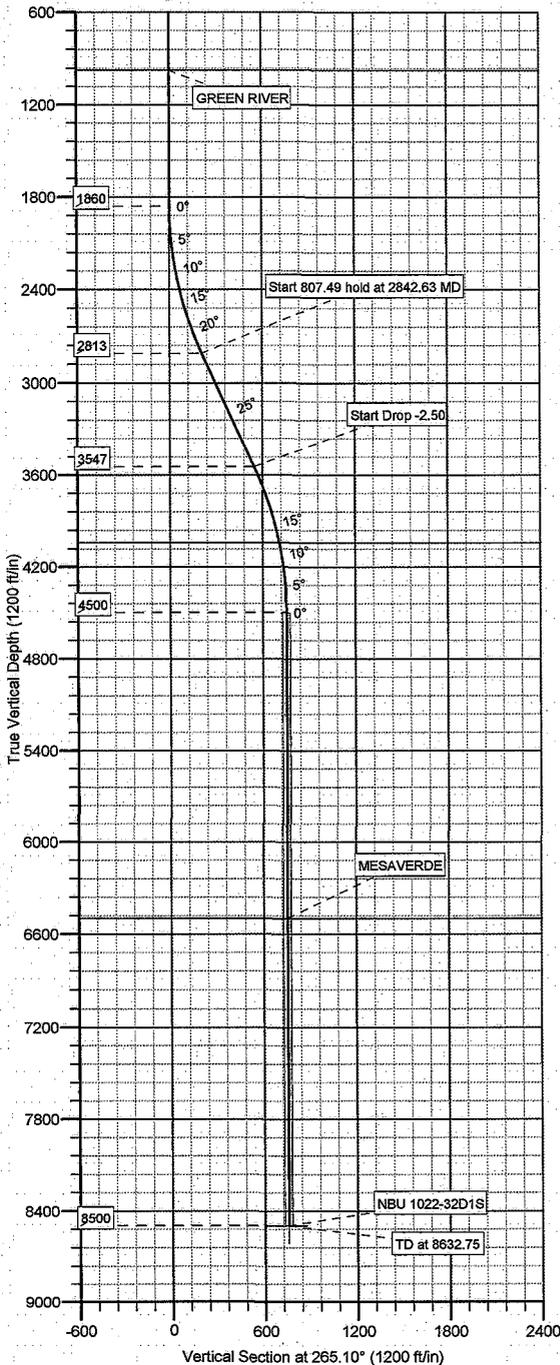
KB ELEV: WELL @ 5467.00ft (Original Well Elev)
 GR ELEV: 5449.00

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
975.00	975.00	GREEN RIVER
4041.00	4170.63	WASATCH
6499.00	6631.75	MESAVERDE



Azimuths to True North
 Magnetic North: 11.45°
 Magnetic Field
 Strength: 52567.4nT
 Dip Angle: 65.88°
 Date: 6/27/2008
 Model: BCGM2007





ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

ANADARKO 1022-32C PAD

NBU 1022-32D1S

NBU 1022-32D1S

Plan: Design #1

Standard Planning Report

27 June, 2008



Weatherford®

Database: EDM 2003.21 Single User Db
Company: ANADARKO PETROLEUM CORP.
Project: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
Site: ANADARKO 1022-32C PAD
Well: NBU 1022-32D1S
Wellbore: NBU 1022-32D1S
Design: Design #1

Local Co-ordinate Reference: Well NBU 1022-32D1S
TVD Reference: WELL @ 5467.00ft (Original Well Elev)
MD Reference: WELL @ 5467.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Utah Central 4302		

Site	ANADARKO 1022-32C PAD				
Site Position:		Northing:	581,559.99ft	Latitude:	39° 54' 43.920 N
From:	Lat/Long	Easting:	2,570,849.12ft	Longitude:	109° 27' 52.981 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	1.30 °

Well	NBU 1022-32D1S					
Well Position	+N/-S	-20.45 ft	Northing:	581,538.28 ft	Latitude:	39° 54' 43.718 N
	+E/-W	-56.10 ft	Easting:	2,570,793.50 ft	Longitude:	109° 27' 53.701 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	5,449.00 ft	Ground Level:	5,449.00 ft

Wellbore	NBU 1022-32D1S				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2007	6/27/2008	11.45	65.88	52,567

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	265.10

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	
1,860.00	0.00	0.00	1,860.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,842.63	24.57	265.10	2,812.80	-17.72	-206.69	2.50	2.50	0.00	265.10	
3,650.12	24.57	265.10	3,547.20	-46.40	-541.16	0.00	0.00	0.00	0.00	
4,632.75	0.00	0.00	4,500.00	-64.13	-747.85	2.50	-2.50	0.00	180.00	
8,632.75	0.00	0.00	8,500.00	-64.13	-747.85	0.00	0.00	0.00	0.00	NBU 1022-32D1S

Database: EDM 2003.21 Single User Db
Company: ANADARKO PETROLEUM CORP.
Project: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
Site: ANADARKO 1022-32C PAD
Well: NBU 1022-32D1S
Wellbore: NBU 1022-32D1S
Design: Design #1

Local Co-ordinate Reference: Well NBU 1022-32D1S
TVD Reference: WELL @ 5467.00ft (Original Well Elev)
MD Reference: WELL @ 5467.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
975.00	0.00	0.00	975.00	0.00	0.00	0.00	0.00	0.00	0.00
GREEN RIVER									
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,860.00	0.00	0.00	1,860.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.50									
1,900.00	1.00	265.10	1,900.00	-0.03	-0.35	0.35	2.50	2.50	0.00
2,000.00	3.50	265.10	1,999.91	-0.37	-4.26	4.27	2.50	2.50	0.00
2,100.00	6.00	265.10	2,099.56	-1.07	-12.51	12.55	2.50	2.50	0.00
2,200.00	8.50	265.10	2,198.75	-2.15	-25.08	25.17	2.50	2.50	0.00
2,300.00	11.00	265.10	2,297.30	-3.60	-41.95	42.11	2.50	2.50	0.00
2,400.00	13.50	265.10	2,395.02	-5.41	-63.09	63.32	2.50	2.50	0.00
2,500.00	16.00	265.10	2,491.71	-7.58	-88.46	88.78	2.50	2.50	0.00
2,600.00	18.50	265.10	2,587.21	-10.12	-118.00	118.43	2.50	2.50	0.00
2,700.00	21.00	265.10	2,681.32	-13.00	-151.67	152.22	2.50	2.50	0.00
2,800.00	23.50	265.10	2,773.87	-16.24	-189.39	190.08	2.50	2.50	0.00
2,842.63	24.57	265.10	2,812.80	-17.72	-206.69	207.45	2.50	2.50	0.00
Start 807.49 hold at 2842.63 MD									
2,900.00	24.57	265.10	2,864.98	-19.76	-230.45	231.30	0.00	0.00	0.00
3,000.00	24.57	265.10	2,955.93	-23.31	-271.87	272.87	0.00	0.00	0.00
3,100.00	24.57	265.10	3,046.87	-26.86	-313.29	314.44	0.00	0.00	0.00
3,200.00	24.57	265.10	3,137.82	-30.42	-354.72	356.02	0.00	0.00	0.00
3,300.00	24.57	265.10	3,228.77	-33.97	-396.14	397.59	0.00	0.00	0.00
3,400.00	24.57	265.10	3,319.72	-37.52	-437.56	439.16	0.00	0.00	0.00
3,500.00	24.57	265.10	3,410.67	-41.07	-478.98	480.74	0.00	0.00	0.00
3,600.00	24.57	265.10	3,501.62	-44.62	-520.40	522.31	0.00	0.00	0.00
3,650.12	24.57	265.10	3,547.20	-46.40	-541.16	543.15	0.00	0.00	0.00
Start Drop -2.50									
3,700.00	23.32	265.10	3,592.79	-48.13	-561.33	563.39	2.50	-2.50	0.00
3,800.00	20.82	265.10	3,685.45	-51.34	-598.76	600.96	2.50	-2.50	0.00
3,900.00	18.32	265.10	3,779.67	-54.20	-632.13	634.45	2.50	-2.50	0.00
4,000.00	15.82	265.10	3,875.26	-56.71	-661.37	663.80	2.50	-2.50	0.00
4,100.00	13.32	265.10	3,972.03	-58.86	-686.43	688.95	2.50	-2.50	0.00
4,170.63	11.55	265.10	4,041.00	-60.16	-701.59	704.16	2.50	-2.50	0.00
WASATCH									
4,200.00	10.82	265.10	4,069.82	-60.65	-707.26	709.86	2.50	-2.50	0.00

Database: EDM 2003.21 Single User Db
Company: ANADARKO PETROLEUM CORP.
Project: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
Site: ANADARKO 1022-32C PAD
Well: NBU 1022-32D1S
Wellbore: NBU 1022-32D1S
Design: Design #1

Local Co-ordinate Reference: Well NBU 1022-32D1S
TVD Reference: WELL @ 5467.00ft (Original Well Elev)
MD Reference: WELL @ 5467.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
4,300.00	8.32	265.10	4,168.42	-62.07	-723.82	726.48	2.50	-2.50	0.00
4,400.00	5.82	265.10	4,267.65	-63.12	-736.08	738.79	2.50	-2.50	0.00
4,500.00	3.32	265.10	4,367.32	-63.80	-744.02	746.75	2.50	-2.50	0.00
4,600.00	0.82	265.10	4,467.25	-64.11	-747.62	750.36	2.50	-2.50	0.00
4,632.75	0.00	0.00	4,500.00	-64.13	-747.85	750.59	2.50	-2.50	0.00
Start 4000.00 hold at 4632.75 MD									
4,700.00	0.00	0.00	4,567.25	-64.13	-747.85	750.59	0.00	0.00	0.00
4,800.00	0.00	0.00	4,667.25	-64.13	-747.85	750.59	0.00	0.00	0.00
4,900.00	0.00	0.00	4,767.25	-64.13	-747.85	750.59	0.00	0.00	0.00
5,000.00	0.00	0.00	4,867.25	-64.13	-747.85	750.59	0.00	0.00	0.00
5,100.00	0.00	0.00	4,967.25	-64.13	-747.85	750.59	0.00	0.00	0.00
5,200.00	0.00	0.00	5,067.25	-64.13	-747.85	750.59	0.00	0.00	0.00
5,300.00	0.00	0.00	5,167.25	-64.13	-747.85	750.59	0.00	0.00	0.00
5,400.00	0.00	0.00	5,267.25	-64.13	-747.85	750.59	0.00	0.00	0.00
5,500.00	0.00	0.00	5,367.25	-64.13	-747.85	750.59	0.00	0.00	0.00
5,600.00	0.00	0.00	5,467.25	-64.13	-747.85	750.59	0.00	0.00	0.00
5,700.00	0.00	0.00	5,567.25	-64.13	-747.85	750.59	0.00	0.00	0.00
5,800.00	0.00	0.00	5,667.25	-64.13	-747.85	750.59	0.00	0.00	0.00
5,900.00	0.00	0.00	5,767.25	-64.13	-747.85	750.59	0.00	0.00	0.00
6,000.00	0.00	0.00	5,867.25	-64.13	-747.85	750.59	0.00	0.00	0.00
6,100.00	0.00	0.00	5,967.25	-64.13	-747.85	750.59	0.00	0.00	0.00
6,200.00	0.00	0.00	6,067.25	-64.13	-747.85	750.59	0.00	0.00	0.00
6,300.00	0.00	0.00	6,167.25	-64.13	-747.85	750.59	0.00	0.00	0.00
6,400.00	0.00	0.00	6,267.25	-64.13	-747.85	750.59	0.00	0.00	0.00
6,500.00	0.00	0.00	6,367.25	-64.13	-747.85	750.59	0.00	0.00	0.00
6,600.00	0.00	0.00	6,467.25	-64.13	-747.85	750.59	0.00	0.00	0.00
6,631.75	0.00	0.00	6,499.00	-64.13	-747.85	750.59	0.00	0.00	0.00
MESAVERDE									
6,700.00	0.00	0.00	6,567.25	-64.13	-747.85	750.59	0.00	0.00	0.00
6,800.00	0.00	0.00	6,667.25	-64.13	-747.85	750.59	0.00	0.00	0.00
6,900.00	0.00	0.00	6,767.25	-64.13	-747.85	750.59	0.00	0.00	0.00
7,000.00	0.00	0.00	6,867.25	-64.13	-747.85	750.59	0.00	0.00	0.00
7,100.00	0.00	0.00	6,967.25	-64.13	-747.85	750.59	0.00	0.00	0.00
7,200.00	0.00	0.00	7,067.25	-64.13	-747.85	750.59	0.00	0.00	0.00
7,300.00	0.00	0.00	7,167.25	-64.13	-747.85	750.59	0.00	0.00	0.00
7,400.00	0.00	0.00	7,267.25	-64.13	-747.85	750.59	0.00	0.00	0.00
7,500.00	0.00	0.00	7,367.25	-64.13	-747.85	750.59	0.00	0.00	0.00
7,600.00	0.00	0.00	7,467.25	-64.13	-747.85	750.59	0.00	0.00	0.00
7,700.00	0.00	0.00	7,567.25	-64.13	-747.85	750.59	0.00	0.00	0.00
7,800.00	0.00	0.00	7,667.25	-64.13	-747.85	750.59	0.00	0.00	0.00
7,900.00	0.00	0.00	7,767.25	-64.13	-747.85	750.59	0.00	0.00	0.00
8,000.00	0.00	0.00	7,867.25	-64.13	-747.85	750.59	0.00	0.00	0.00
8,100.00	0.00	0.00	7,967.25	-64.13	-747.85	750.59	0.00	0.00	0.00
8,200.00	0.00	0.00	8,067.25	-64.13	-747.85	750.59	0.00	0.00	0.00
8,300.00	0.00	0.00	8,167.25	-64.13	-747.85	750.59	0.00	0.00	0.00
8,400.00	0.00	0.00	8,267.25	-64.13	-747.85	750.59	0.00	0.00	0.00
8,500.00	0.00	0.00	8,367.25	-64.13	-747.85	750.59	0.00	0.00	0.00
8,600.00	0.00	0.00	8,467.25	-64.13	-747.85	750.59	0.00	0.00	0.00
8,632.75	0.00	0.00	8,500.00	-64.13	-747.85	750.59	0.00	0.00	0.00

TD at 8632.75 - NBU 1022-32D1S

Database: EDM 2003.21 Single User Db
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Project: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
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Local Co-ordinate Reference: Well NBU 1022-32D1S
TVD Reference: WELL @ 5467.00ft (Original Well Elev)
MD Reference: WELL @ 5467.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
975.00	975.00	GREEN RIVER		0.00	
4,170.63	4,041.00	WASATCH		0.00	
6,631.75	6,499.00	MESAVERDE		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,860.00	1,860.00	0.00	0.00	Start Build 2.50
2,842.63	2,812.80	-17.72	-206.69	Start 807.49 hold at 2842.63 MD
3,650.12	3,547.20	-46.40	-541.16	Start Drop -2.50
4,632.75	4,500.00	-64.13	-747.85	Start 4000.00 hold at 4632.75 MD
8,632.75	8,500.00	-64.13	-747.85	TD at 8632.75



ANADARKO PETROLEUM CORP.

**UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
ANADARKO 1022-32C PAD
NBU 1022-32D1S**

**NBU 1022-32D1S
Design #1**

Anticollision Report

27 June, 2008



Company: ANADARKO PETROLEUM CORP.
Project: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
Reference Site: ANADARKO 1022-32C PAD
Site Error: 0.00ft
Reference Well: NBU 1022-32D1S
Well Error: 0.00ft
Reference Wellbore: NBU 1022-32D1S
Reference Design: Design #1

Local Co-ordinate Reference: Well NBU 1022-32D1S
TVD Reference: WELL @ 5467.00ft (Original Well Elev)
MD Reference: WELL @ 5467.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 2003.21 Single User Db
Offset TVD Reference: Offset Datum

Reference	Design #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program **Date** 6/26/2008

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,632.75	Design #1 (NBU 1022-32D1S)	MWD	MWD - Standard

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
ANADARKO 1022-32C PAD						
NBU 1022-32B3S - NBU 1022-32B3S - Design #1	1,860.00	1,860.00	60.20	52.10	7.436	CC, ES
NBU 1022-32B3S - NBU 1022-32B3S - Design #1	1,900.00	1,899.44	60.72	52.46	7.353	SF
NBU 1022-32D4AS - NBU 1022-32D4AS - Design #1	2,120.69	2,123.02	18.35	9.29	2.025	CC, ES, SF
NBU 1022-32D4DS - NBU 1022-32D4DS - Design #1	2,074.59	2,078.43	39.47	30.58	4.440	CC
NBU 1022-32D4DS - NBU 1022-32D4DS - Design #1	2,100.00	2,104.19	39.53	30.55	4.402	ES, SF

Offset Design ANADARKO 1022-32C PAD - NBU 1022-32B3S - NBU 1022-32B3S - Design #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	68.74	21.83	56.10	60.20					
100.00	100.00	100.00	100.00	0.09	0.09	68.74	21.83	56.10	60.20	60.01	0.18	326.619		
200.00	200.00	200.00	200.00	0.32	0.32	68.74	21.83	56.10	60.20	59.56	0.63	94.975		
300.00	300.00	300.00	300.00	0.54	0.54	68.74	21.83	56.10	60.20	59.12	1.08	55.566		
400.00	400.00	400.00	400.00	0.77	0.77	68.74	21.83	56.10	60.20	58.67	1.53	39.271		
500.00	500.00	500.00	500.00	0.99	0.99	68.74	21.83	56.10	60.20	58.22	1.98	30.366		
600.00	600.00	600.00	600.00	1.22	1.22	68.74	21.83	56.10	60.20	57.77	2.43	24.753		
700.00	700.00	700.00	700.00	1.44	1.44	68.74	21.83	56.10	60.20	57.32	2.88	20.891		
800.00	800.00	800.00	800.00	1.67	1.67	68.74	21.83	56.10	60.20	56.87	3.33	18.072		
900.00	900.00	900.00	900.00	1.89	1.89	68.74	21.83	56.10	60.20	56.42	3.78	15.923		
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	68.74	21.83	56.10	60.20	55.97	4.23	14.231		
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	68.74	21.83	56.10	60.20	55.52	4.68	12.864		
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	68.74	21.83	56.10	60.20	55.07	5.13	11.737		
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	68.74	21.83	56.10	60.20	54.62	5.58	10.791		
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	68.74	21.83	56.10	60.20	54.17	6.03	9.986		
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	68.74	21.83	56.10	60.20	53.72	6.48	9.293		
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	68.74	21.83	56.10	60.20	53.27	6.93	8.690		
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	68.74	21.83	56.10	60.20	52.82	7.38	8.161		
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	68.74	21.83	56.10	60.20	52.37	7.83	7.692		
1,860.00	1,860.00	1,860.00	1,860.00	4.05	4.05	68.74	21.83	56.10	60.20	52.10	8.10	7.436	CC, ES	
1,900.00	1,900.00	1,899.44	1,899.44	4.13	4.13	164.07	21.56	56.40	60.72	52.46	8.26	7.353	SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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Reference Design: Design #1

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North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 2003.21 Single User Db
Offset TVD Reference: Offset Datum

Offset Design ANADARKO 1022-32C PAD - NBU 1022-32B3S - NBU 1022-32B3S - Design #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,000.00	1,999.91	1,997.56	1,997.44	4.33	4.31	168.45	18.47	59.74	66.76	58.14	8.62	7.745		
2,100.00	2,099.56	2,094.09	2,093.50	4.54	4.49	175.38	12.11	66.63	80.46	71.48	8.98	8.962		
2,200.00	2,198.75	2,187.97	2,186.36	4.76	4.69	-177.81	2.78	76.74	102.69	93.36	9.33	11.007		
2,300.00	2,297.30	2,278.29	2,274.95	5.01	4.91	-172.31	-9.12	89.62	133.57	123.89	9.68	13.800		
2,400.00	2,395.02	2,364.28	2,358.44	5.29	5.16	-168.18	-23.07	104.73	172.67	162.64	10.02	17.225		
2,500.00	2,491.71	2,445.37	2,436.25	5.63	5.44	-165.09	-38.55	121.49	219.35	208.99	10.36	21.163		
2,600.00	2,587.21	2,521.15	2,508.02	6.03	5.74	-162.71	-55.03	139.34	272.97	262.27	10.70	25.508		
2,700.00	2,681.32	2,591.37	2,573.62	6.51	6.07	-160.78	-72.01	157.73	332.88	321.84	11.04	30.153		
2,800.00	2,773.87	2,655.93	2,633.09	7.07	6.43	-159.13	-89.06	176.20	398.46	387.07	11.40	34.968		
2,842.63	2,812.80	2,681.74	2,656.62	7.34	6.58	-158.47	-96.26	183.99	428.01	416.46	11.54	37.079		
2,900.00	2,864.98	2,715.25	2,686.95	7.73	6.79	-158.13	-105.92	194.45	468.68	456.86	11.82	39.636		
3,000.00	2,955.93	2,771.15	2,736.97	8.43	7.17	-157.56	-122.84	212.78	541.04	528.70	12.34	43.849		
3,100.00	3,046.87	2,824.01	2,783.59	9.17	7.56	-157.03	-139.74	231.09	615.15	602.28	12.87	47.809		
3,200.00	3,137.82	2,878.50	2,830.95	9.93	8.00	-156.49	-158.03	250.89	690.80	677.37	13.43	51.450		
3,300.00	3,228.77	2,943.25	2,887.03	10.71	8.56	-155.95	-179.99	274.67	766.87	752.84	14.03	54.643		
3,400.00	3,319.72	3,008.01	2,943.11	11.51	9.14	-155.51	-201.95	298.46	842.97	828.32	14.65	57.552		
3,500.00	3,410.67	3,072.76	2,999.18	12.33	9.73	-155.13	-223.92	322.25	919.09	903.80	15.28	60.137		
3,600.00	3,501.62	3,137.51	3,055.26	13.15	10.34	-154.82	-245.88	346.03	995.21	979.28	15.93	62.470		
3,650.12	3,547.20	3,169.96	3,083.36	13.57	10.64	-154.68	-256.89	357.96	1,033.37	1,017.11	16.26	63.552		
3,700.00	3,592.79	3,202.62	3,111.65	13.93	10.96	-155.14	-267.97	369.95	1,071.03	1,054.40	16.64	64.375		
3,800.00	3,685.45	3,270.21	3,170.18	14.55	11.61	-155.89	-290.89	394.78	1,144.56	1,127.18	17.38	65.854		
3,900.00	3,779.67	3,340.52	3,231.07	15.12	12.30	-156.46	-314.74	420.61	1,215.36	1,197.23	18.13	67.033		
4,000.00	3,875.26	3,413.41	3,294.19	15.63	13.03	-156.87	-339.46	447.39	1,283.33	1,264.45	18.88	67.966		
4,100.00	3,972.03	3,488.74	3,359.43	16.07	13.78	-157.15	-365.02	475.06	1,348.36	1,328.73	19.63	68.694		
4,200.00	4,069.82	3,566.37	3,426.67	16.46	14.57	-157.33	-391.35	503.58	1,410.37	1,390.01	20.36	69.260		
4,300.00	4,168.42	3,646.16	3,495.76	16.79	15.39	-157.41	-418.41	532.89	1,469.28	1,448.20	21.08	69.704		
4,400.00	4,267.65	3,727.95	3,566.60	17.05	16.23	-157.41	-446.16	562.94	1,525.01	1,503.24	21.77	70.055		
4,500.00	4,367.32	3,811.59	3,639.03	17.26	17.09	-157.33	-474.53	593.66	1,577.50	1,555.07	22.43	70.336		
4,600.00	4,467.25	3,896.91	3,712.92	17.41	17.98	-157.18	-503.47	625.00	1,626.70	1,603.64	23.05	70.567		
4,632.75	4,500.00	3,925.19	3,737.41	17.45	18.27	107.98	-513.06	635.39	1,642.09	1,618.84	23.25	70.636		
4,700.00	4,567.25	3,983.43	3,787.85	17.53	18.88	108.45	-532.82	656.79	1,673.36	1,649.73	23.63	70.819		
4,800.00	4,667.25	4,070.04	3,862.85	17.65	19.79	109.12	-562.19	688.60	1,720.04	1,695.84	24.20	71.076		
4,900.00	4,767.25	4,156.64	3,937.85	17.77	20.69	109.76	-591.57	720.41	1,766.89	1,742.13	24.77	71.346		
5,000.00	4,867.25	4,243.24	4,012.85	17.90	21.61	110.36	-620.94	752.23	1,813.91	1,788.59	25.32	71.628		
5,100.00	4,967.25	4,329.84	4,087.85	18.03	22.52	110.94	-650.32	784.04	1,861.09	1,835.21	25.88	71.918		
5,200.00	5,067.25	4,416.44	4,162.85	18.16	23.44	111.49	-679.69	815.86	1,908.41	1,881.99	26.43	72.215		
5,300.00	5,167.25	4,503.05	4,237.85	18.29	24.36	112.01	-709.07	847.67	1,955.87	1,928.90	26.97	72.517		
5,400.00	5,267.25	4,589.65	4,312.85	18.43	25.27	112.51	-738.44	879.48	2,003.45	1,975.94	27.51	72.821		
5,500.00	5,367.25	4,676.25	4,387.85	18.56	26.17	113.00	-767.71	911.29	2,051.03	2,023.52	28.04	73.126		
5,600.00	5,467.25	4,762.85	4,462.85	18.70	27.06	113.48	-796.89	943.10	2,098.61	2,071.10	28.56	73.431		
5,700.00	5,567.25	4,849.45	4,537.85	18.84	27.94	113.95	-825.97	974.91	2,146.19	2,118.67	29.07	73.736		
5,800.00	5,667.25	4,936.05	4,612.85	18.98	28.81	114.42	-855.05	1,006.72	2,193.77	2,166.24	29.57	74.041		
5,900.00	5,767.25	5,022.65	4,687.85	19.12	29.68	114.89	-884.13	1,038.53	2,241.35	2,213.81	30.06	74.346		
6,000.00	5,867.25	5,109.25	4,762.85	19.27	30.54	115.36	-913.21	1,070.34	2,288.93	2,261.38	30.54	74.651		
6,100.00	5,967.25	5,195.85	4,837.85	19.41	31.40	115.83	-942.29	1,102.15	2,336.51	2,308.95	31.02	74.956		
6,200.00	6,067.25	5,282.45	4,912.85	19.56	32.26	116.30	-971.37	1,133.96	2,384.09	2,356.52	31.49	75.261		
6,300.00	6,167.25	5,369.05	4,987.85	19.71	33.11	116.77	-1,000.45	1,165.77	2,431.67	2,404.09	31.95	75.566		
6,400.00	6,267.25	5,455.65	5,062.85	19.86	33.96	117.24	-1,029.53	1,197.58	2,479.25	2,451.66	32.40	75.871		
6,500.00	6,367.25	5,542.25	5,137.85	20.01	34.81	117.71	-1,058.61	1,229.39	2,526.83	2,500.00	32.84	76.176		
6,600.00	6,467.25	5,628.85	5,212.85	20.17	35.66	118.18	-1,087.69	1,261.20	2,574.41	2,548.57	33.27	76.481		
6,700.00	6,567.25	5,715.45	5,287.85	20.32	36.51	118.65	-1,116.77	1,293.01	2,622.00	2,597.15	33.69	76.786		

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Survey Program: 0-MWVD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (*)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
6,800.00	6,667.25	7,002.18	6,667.25	20.48	32.09	115.45	-945.07	1,103.26	2,050.04	2,015.15	34.90	58.747		
6,900.00	6,767.25	7,102.18	6,767.25	20.63	32.19	115.45	-945.07	1,103.26	2,050.04	2,014.80	35.24	58.169		
7,000.00	6,867.25	7,202.18	6,867.25	20.79	32.28	115.45	-945.07	1,103.26	2,050.04	2,014.45	35.59	57.598		
7,100.00	6,967.25	7,302.18	6,967.25	20.95	32.38	115.45	-945.07	1,103.26	2,050.04	2,014.10	35.94	57.035		
7,200.00	7,067.25	7,402.18	7,067.25	21.11	32.48	115.45	-945.07	1,103.26	2,050.04	2,013.75	36.30	56.480		
7,300.00	7,167.25	7,502.18	7,167.25	21.27	32.58	115.45	-945.07	1,103.26	2,050.04	2,013.39	36.65	55.933		
7,400.00	7,267.25	7,602.18	7,267.25	21.43	32.69	115.45	-945.07	1,103.26	2,050.04	2,013.03	37.01	55.393		
7,500.00	7,367.25	7,702.18	7,367.25	21.60	32.79	115.45	-945.07	1,103.26	2,050.04	2,012.67	37.37	54.860		
7,600.00	7,467.25	7,802.18	7,467.25	21.76	32.89	115.45	-945.07	1,103.26	2,050.04	2,012.31	37.73	54.335		
7,700.00	7,567.25	7,902.18	7,567.25	21.93	33.00	115.45	-945.07	1,103.26	2,050.04	2,011.95	38.09	53.817		
7,800.00	7,667.25	8,002.18	7,667.25	22.10	33.11	115.45	-945.07	1,103.26	2,050.04	2,011.58	38.46	53.306		
7,900.00	7,767.25	8,102.18	7,767.25	22.27	33.21	115.45	-945.07	1,103.26	2,050.04	2,011.22	38.82	52.803		
8,000.00	7,867.25	8,202.18	7,867.25	22.43	33.32	115.45	-945.07	1,103.26	2,050.04	2,010.85	39.19	52.307		
8,100.00	7,967.25	8,302.18	7,967.25	22.60	33.43	115.45	-945.07	1,103.26	2,050.04	2,010.48	39.56	51.818		
8,200.00	8,067.25	8,402.18	8,067.25	22.78	33.55	115.45	-945.07	1,103.26	2,050.04	2,010.11	39.93	51.335		
8,300.00	8,167.25	8,502.18	8,167.25	22.95	33.66	115.45	-945.07	1,103.26	2,050.04	2,009.73	40.31	50.860		
8,400.00	8,267.25	8,602.18	8,267.25	23.12	33.77	115.45	-945.07	1,103.26	2,050.04	2,009.36	40.68	50.392		
8,500.00	8,367.25	8,702.18	8,367.25	23.29	33.89	115.45	-945.07	1,103.26	2,050.04	2,008.98	41.06	49.930		
8,600.00	8,467.25	8,802.18	8,467.25	23.47	34.00	115.45	-945.07	1,103.26	2,050.04	2,008.61	41.44	49.475		
8,632.75	8,500.00	8,834.93	8,500.00	23.53	34.04	115.45	-945.07	1,103.26	2,050.04	2,008.48	41.56	49.328		

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Reference Wellbore: NBU 1022-32D1S
Reference Design: Design #1

Local Co-ordinate Reference: Well NBU 1022-32D1S
TVD Reference: WELL @ 5467.00ft (Original Well Elev)
MD Reference: WELL @ 5467.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 2003.21 Single User Db
Offset TVD Reference: Offset Datum

Offset Design ANADARKO 1022-32C PAD - NBU 1022-32D4AS - NBU 1022-32D4AS - Design #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooffset (°)	Offset Wellbore Centre		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)		Separation Factor
							+N/-S (ft)	+E/-W (ft)					
0.00	0.00	0.00	0.00	0.00	0.00	68.80	7.28	18.78	20.14				
100.00	100.00	100.00	100.00	0.09	0.09	68.80	7.28	18.78	20.14	19.96	0.18	109.282	
200.00	200.00	200.00	200.00	0.32	0.32	68.80	7.28	18.78	20.14	19.51	0.63	31.777	
300.00	300.00	300.00	300.00	0.54	0.54	68.80	7.28	18.78	20.14	19.06	1.08	18.592	
400.00	400.00	400.00	400.00	0.77	0.77	68.80	7.28	18.78	20.14	18.61	1.53	13.139	
500.00	500.00	500.00	500.00	0.99	0.99	68.80	7.28	18.78	20.14	18.16	1.98	10.160	
600.00	600.00	600.00	600.00	1.22	1.22	68.80	7.28	18.78	20.14	17.71	2.43	8.282	
700.00	700.00	700.00	700.00	1.44	1.44	68.80	7.28	18.78	20.14	17.26	2.88	6.990	
800.00	800.00	800.00	800.00	1.67	1.67	68.80	7.28	18.78	20.14	16.81	3.33	6.047	
900.00	900.00	900.00	900.00	1.89	1.89	68.80	7.28	18.78	20.14	16.36	3.78	5.328	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	68.80	7.28	18.78	20.14	15.91	4.23	4.761	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	68.80	7.28	18.78	20.14	15.46	4.68	4.304	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	68.80	7.28	18.78	20.14	15.01	5.13	3.927	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	68.80	7.28	18.78	20.14	14.56	5.58	3.610	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	68.80	7.28	18.78	20.14	14.11	6.03	3.341	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	68.80	7.28	18.78	20.14	13.66	6.48	3.109	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	68.80	7.28	18.78	20.14	13.21	6.93	2.908	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	68.80	7.28	18.78	20.14	12.76	7.38	2.730	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	68.80	7.28	18.78	20.14	12.32	7.83	2.574	
1,860.00	1,860.00	1,860.00	1,860.00	4.05	4.05	68.80	7.28	18.78	20.14	12.05	8.10	2.488	
1,900.00	1,900.00	1,900.42	1,900.41	4.13	4.13	164.21	7.06	18.42	20.06	11.80	8.26	2.429	
2,000.00	1,999.91	2,001.40	2,001.27	4.33	4.32	170.24	4.51	14.34	19.28	10.65	8.63	2.235	
2,100.00	2,099.56	2,102.20	2,101.55	4.54	4.52	-175.81	-0.85	5.78	18.40	9.41	8.99	2.047	
2,120.69	2,120.13	2,123.02	2,122.19	4.58	4.56	-171.87	-2.31	3.45	18.35	9.29	9.06	2.025	CC, ES, SF
2,200.00	2,198.75	2,202.68	2,200.84	4.76	4.73	-154.33	-8.98	-7.21	19.25	9.87	9.38	2.053	
2,300.00	2,297.30	2,302.71	2,298.76	5.01	4.99	-132.13	-19.82	-24.52	23.86	13.97	9.88	2.414	
2,400.00	2,395.02	2,402.18	2,394.93	5.29	5.29	-115.93	-33.27	-46.02	32.68	22.16	10.52	3.107	
2,500.00	2,491.71	2,500.97	2,489.01	5.63	5.66	-105.65	-49.25	-71.54	45.05	33.80	11.25	4.005	
2,600.00	2,587.21	2,598.98	2,580.68	6.03	6.12	-99.11	-67.63	-100.90	60.35	48.26	12.09	4.993	
2,700.00	2,681.32	2,696.13	2,669.67	6.51	6.66	-94.74	-88.28	-133.90	78.22	65.16	13.06	5.990	
2,800.00	2,773.87	2,792.32	2,755.73	7.07	7.31	-91.65	-111.07	-170.31	98.42	84.24	14.18	6.941	
2,842.63	2,812.80	2,833.03	2,791.48	7.34	7.62	-90.59	-121.41	-186.82	107.70	92.99	14.71	7.323	
2,900.00	2,864.98	2,888.21	2,839.36	7.73	8.06	-89.41	-135.96	-210.07	120.72	105.26	15.45	7.811	
3,000.00	2,955.93	2,985.48	2,923.60	8.43	8.88	-87.73	-161.75	-251.28	143.65	126.82	16.83	8.537	
3,100.00	3,046.87	3,082.74	3,007.83	9.17	9.74	-86.51	-187.55	-292.50	166.67	148.41	18.26	9.130	
3,200.00	3,137.82	3,180.00	3,092.07	9.93	10.64	-85.59	-213.35	-333.72	189.74	170.00	19.73	9.616	
3,300.00	3,228.77	3,277.26	3,176.31	10.71	11.55	-84.86	-239.15	-374.93	212.84	191.60	21.24	10.019	
3,400.00	3,319.72	3,374.52	3,260.54	11.51	12.48	-84.28	-264.95	-416.15	235.98	213.19	22.79	10.356	
3,500.00	3,410.67	3,471.79	3,344.78	12.33	13.43	-83.80	-290.75	-457.36	259.13	234.77	24.35	10.640	
3,600.00	3,501.62	3,569.05	3,429.01	13.15	14.38	-83.40	-316.55	-498.58	282.29	256.35	25.94	10.883	
3,650.12	3,547.20	3,617.80	3,471.23	13.57	14.86	-83.23	-329.48	-519.24	293.91	267.17	26.74	10.991	
3,700.00	3,592.79	3,666.28	3,513.22	13.93	15.35	-83.26	-342.34	-539.79	305.53	278.02	27.51	11.106	
3,800.00	3,685.45	3,763.25	3,597.20	14.55	16.32	-82.81	-368.06	-580.88	329.27	300.39	28.88	11.402	
3,900.00	3,779.67	3,859.75	3,680.78	15.12	17.29	-81.81	-393.65	-621.77	353.71	323.60	30.11	11.748	
4,000.00	3,875.26	3,955.59	3,763.78	15.63	18.26	-80.39	-419.08	-662.38	379.13	347.93	31.19	12.155	
4,100.00	3,972.03	4,064.15	3,859.16	16.07	19.15	-78.61	-446.57	-706.31	404.30	372.24	32.06	12.612	
4,200.00	4,069.82	4,175.88	3,960.22	16.46	19.94	-77.02	-471.82	-746.66	427.35	394.57	32.78	13.036	
4,300.00	4,168.42	4,290.01	4,066.15	16.79	20.66	-75.60	-494.34	-782.62	448.08	414.69	33.39	13.420	
4,400.00	4,267.65	4,406.41	4,176.60	17.05	21.30	-74.28	-513.80	-813.72	466.29	432.43	33.87	13.768	
4,500.00	4,367.32	4,524.91	4,291.13	17.26	21.83	-73.05	-529.91	-839.45	481.84	447.63	34.21	14.084	
4,600.00	4,467.25	4,645.32	4,409.20	17.41	22.27	-71.86	-542.38	-859.39	494.58	460.15	34.43	14.365	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company: ANADARKO PETROLEUM CORP.
Project: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
Reference Site: ANADARKO 1022-32C PAD
Site Error: 0.00ft
Reference Well: NBU 1022-32D1S
Well Error: 0.00ft
Reference Wellbore: NBU 1022-32D1S
Reference Design: Design #1

Local Co-ordinate Reference: Well NBU 1022-32D1S
TVD Reference: WELL @ 5467.00ft (Original Well Elev)
MD Reference: WELL @ 5467.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 2003.21 Single User Db
Offset TVD Reference: Offset Datum

Offset Design ANADARKO 1022-32C PAD - NBU 1022-32D4AS - NBU 1022-32D4AS - Design #1													Offset Site Error:	0.00ft
Survey Program: 0-MWD													Offset Well Error:	0.00ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
4,632.75	4,500.00	4,685.12	4,448.52	17.45	22.39	-166.37	-545.63	-864.59	498.12	463.65	34.47	14.451		
4,700.00	4,567.25	4,767.49	4,530.27	17.53	22.60	-165.57	-550.98	-873.13	504.07	469.54	34.53	14.596		
4,800.00	4,667.25	4,891.23	4,653.70	17.65	22.83	-164.91	-555.49	-880.33	509.09	474.37	34.72	14.664		
4,900.00	4,767.25	5,004.80	4,767.25	17.77	22.95	-164.81	-556.16	-881.40	509.83	474.87	34.96	14.582		
5,000.00	4,867.25	5,104.80	4,867.25	17.90	23.04	-164.81	-556.16	-881.40	509.83	474.62	35.22	14.478		
5,100.00	4,967.25	5,204.80	4,967.25	18.03	23.14	-164.81	-556.16	-881.40	509.83	474.36	35.47	14.373		
5,200.00	5,067.25	5,304.80	5,067.25	18.16	23.24	-164.81	-556.16	-881.40	509.83	474.10	35.73	14.268		
5,300.00	5,167.25	5,404.80	5,167.25	18.29	23.34	-164.81	-556.16	-881.40	509.83	473.83	36.00	14.163		
5,400.00	5,267.25	5,504.80	5,267.25	18.43	23.44	-164.81	-556.16	-881.40	509.83	473.57	36.27	14.058		
5,500.00	5,367.25	5,604.80	5,367.25	18.56	23.54	-164.81	-556.16	-881.40	509.83	473.29	36.54	13.954		
5,600.00	5,467.25	5,704.80	5,467.25	18.70	23.65	-164.81	-556.16	-881.40	509.83	473.02	36.81	13.849		
5,700.00	5,567.25	5,804.80	5,567.25	18.84	23.76	-164.81	-556.16	-881.40	509.83	472.74	37.09	13.745		
5,800.00	5,667.25	5,904.80	5,667.25	18.98	23.86	-164.81	-556.16	-881.40	509.83	472.46	37.37	13.642		
5,900.00	5,767.25	6,004.80	5,767.25	19.12	23.98	-164.81	-556.16	-881.40	509.83	472.17	37.66	13.538		
6,000.00	5,867.25	6,104.80	5,867.25	19.27	24.09	-164.81	-556.16	-881.40	509.83	471.88	37.95	13.435		
6,100.00	5,967.25	6,204.80	5,967.25	19.41	24.20	-164.81	-556.16	-881.40	509.83	471.59	38.24	13.333		
6,200.00	6,067.25	6,304.80	6,067.25	19.56	24.32	-164.81	-556.16	-881.40	509.83	471.30	38.53	13.231		
6,300.00	6,167.25	6,404.80	6,167.25	19.71	24.43	-164.81	-556.16	-881.40	509.83	471.00	38.83	13.130		
6,400.00	6,267.25	6,504.80	6,267.25	19.86	24.55	-164.81	-556.16	-881.40	509.83	470.70	39.13	13.029		
6,500.00	6,367.25	6,604.80	6,367.25	20.01	24.67	-164.81	-556.16	-881.40	509.83	470.40	39.43	12.929		
6,600.00	6,467.25	6,704.80	6,467.25	20.17	24.79	-164.81	-556.16	-881.40	509.83	470.09	39.74	12.829		
6,700.00	6,567.25	6,804.80	6,567.25	20.32	24.91	-164.81	-556.16	-881.40	509.83	469.78	40.05	12.730		
6,800.00	6,667.25	6,904.80	6,667.25	20.48	25.04	-164.81	-556.16	-881.40	509.83	469.47	40.36	12.632		
6,900.00	6,767.25	7,004.80	6,767.25	20.63	25.16	-164.81	-556.16	-881.40	509.83	469.16	40.67	12.535		
7,000.00	6,867.25	7,104.80	6,867.25	20.79	25.29	-164.81	-556.16	-881.40	509.83	468.84	40.99	12.438		
7,100.00	6,967.25	7,204.80	6,967.25	20.95	25.42	-164.81	-556.16	-881.40	509.83	468.52	41.31	12.342		
7,200.00	7,067.25	7,304.80	7,067.25	21.11	25.55	-164.81	-556.16	-881.40	509.83	468.20	41.63	12.247		
7,300.00	7,167.25	7,404.80	7,167.25	21.27	25.68	-164.81	-556.16	-881.40	509.83	467.88	41.95	12.152		
7,400.00	7,267.25	7,504.80	7,267.25	21.43	25.81	-164.81	-556.16	-881.40	509.83	467.55	42.28	12.059		
7,500.00	7,367.25	7,604.80	7,367.25	21.60	25.95	-164.81	-556.16	-881.40	509.83	467.22	42.61	11.966		
7,600.00	7,467.25	7,704.80	7,467.25	21.76	26.08	-164.81	-556.16	-881.40	509.83	466.89	42.94	11.874		
7,700.00	7,567.25	7,804.80	7,567.25	21.93	26.22	-164.81	-556.16	-881.40	509.83	466.56	43.27	11.782		
7,800.00	7,667.25	7,904.80	7,667.25	22.10	26.35	-164.81	-556.16	-881.40	509.83	466.23	43.60	11.692		
7,900.00	7,767.25	8,004.80	7,767.25	22.27	26.49	-164.81	-556.16	-881.40	509.83	465.89	43.94	11.602		
8,000.00	7,867.25	8,104.80	7,867.25	22.43	26.63	-164.81	-556.16	-881.40	509.83	465.55	44.28	11.514		
8,100.00	7,967.25	8,204.80	7,967.25	22.60	26.77	-164.81	-556.16	-881.40	509.83	465.21	44.62	11.426		
8,200.00	8,067.25	8,304.80	8,067.25	22.78	26.91	-164.81	-556.16	-881.40	509.83	464.87	44.96	11.339		
8,300.00	8,167.25	8,404.80	8,167.25	22.95	27.06	-164.81	-556.16	-881.40	509.83	464.52	45.31	11.253		
8,400.00	8,267.25	8,504.80	8,267.25	23.12	27.20	-164.81	-556.16	-881.40	509.83	464.18	45.65	11.167		
8,500.00	8,367.25	8,604.80	8,367.25	23.29	27.35	-164.81	-556.16	-881.40	509.83	463.83	46.00	11.083		
8,600.00	8,467.25	8,704.80	8,467.25	23.47	27.49	-164.81	-556.16	-881.40	509.83	463.48	46.35	10.999		
8,632.75	8,500.00	8,737.55	8,500.00	23.53	27.54	-164.81	-556.16	-881.40	509.83	463.36	46.47	10.972		

Company: ANADARKO PETROLEUM CORP.
Project: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
Reference Site: ANADARKO 1022-32C PAD
Site Error: 0.00ft
Reference Well: NBU 1022-32D1S
Well Error: 0.00ft
Reference Wellbore: NBU 1022-32D1S
Reference Design: Design #1

Local Co-ordinate Reference: Well NBU 1022-32D1S
TVD Reference: WELL @ 5467.00ft (Original Well Elev)
MD Reference: WELL @ 5467.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 2003.21 Single User Db
Offset TVD Reference: Offset Datum

Offset Design ANADARKO 1022-32C PAD - NBU 1022-32D4DS - NBU 1022-32D4DS - Design #1													Offset Site Error:	0.00ft
Survey Program: 0-MWD													Offset Well Error:	0.00ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (°)	Offset Wellbore Centre		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
							+N/-S (ft)	+E/-W (ft)						
0.00	0.00	0.00	0.00	0.00	0.00	68.81	14.56	37.56	40.28					
100.00	100.00	100.00	100.00	0.09	0.09	68.81	14.56	37.56	40.28	40.09	0.18	218.537		
200.00	200.00	200.00	200.00	0.32	0.32	68.81	14.56	37.56	40.28	39.64	0.63	63.546		
300.00	300.00	300.00	300.00	0.54	0.54	68.81	14.56	37.56	40.28	39.19	1.08	37.179		
400.00	400.00	400.00	400.00	0.77	0.77	68.81	14.56	37.56	40.28	38.75	1.53	26.276		
500.00	500.00	500.00	500.00	0.99	0.99	68.81	14.56	37.56	40.28	38.30	1.98	20.318		
600.00	600.00	600.00	600.00	1.22	1.22	68.81	14.56	37.56	40.28	37.85	2.43	16.562		
700.00	700.00	700.00	700.00	1.44	1.44	68.81	14.56	37.56	40.28	37.40	2.88	13.978		
800.00	800.00	800.00	800.00	1.67	1.67	68.81	14.56	37.56	40.28	36.95	3.33	12.092		
900.00	900.00	900.00	900.00	1.89	1.89	68.81	14.56	37.56	40.28	36.50	3.78	10.654		
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	68.81	14.56	37.56	40.28	36.05	4.23	9.522		
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	68.81	14.56	37.56	40.28	35.60	4.68	8.607		
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	68.81	14.56	37.56	40.28	35.15	5.13	7.853		
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	68.81	14.56	37.56	40.28	34.70	5.58	7.220		
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	68.81	14.56	37.56	40.28	34.25	6.03	6.682		
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	68.81	14.56	37.56	40.28	33.80	6.48	6.218		
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	68.81	14.56	37.56	40.28	33.35	6.93	5.814		
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	68.81	14.56	37.56	40.28	32.90	7.38	5.460		
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	68.81	14.56	37.56	40.28	32.45	7.83	5.146		
1,860.00	1,860.00	1,860.00	1,860.00	4.05	4.05	68.81	14.56	37.56	40.28	32.18	8.10	4.975		
1,900.00	1,900.00	1,900.78	1,900.78	4.13	4.13	164.11	14.25	37.25	40.22	31.96	8.26	4.870		
2,000.00	1,999.91	2,002.65	2,002.51	4.33	4.31	168.59	10.79	33.80	39.74	31.12	8.62	4.609		
2,074.59	2,074.27	2,078.43	2,077.95	4.48	4.46	175.29	5.72	28.75	39.47	30.58	8.89	4.440 CC		
2,100.00	2,099.56	2,104.19	2,103.52	4.54	4.51	178.21	3.52	26.55	39.53	30.55	8.98	4.402 ES, SF		
2,200.00	2,198.75	2,205.19	2,203.31	4.76	4.72	-167.71	-7.47	15.59	41.27	31.93	9.34	4.417		
2,300.00	2,297.30	2,305.44	2,301.41	5.01	4.96	-151.88	-22.06	1.04	46.97	37.19	9.78	4.802		
2,400.00	2,395.02	2,404.73	2,397.38	5.29	5.26	-137.77	-40.08	-16.93	57.78	47.44	10.35	5.585		
2,500.00	2,491.71	2,502.90	2,490.83	5.63	5.62	-126.96	-61.35	-38.13	73.65	62.60	11.05	6.667		
2,600.00	2,587.21	2,600.00	2,581.62	6.03	6.06	-119.14	-85.70	-62.41	93.99	82.11	11.87	7.915		
2,700.00	2,681.32	2,695.24	2,668.87	6.51	6.58	-113.51	-112.73	-89.36	118.24	105.41	12.84	9.212		
2,800.00	2,773.87	2,789.17	2,752.95	7.07	7.19	-109.32	-142.36	-118.92	145.98	132.05	13.94	10.474		
2,842.63	2,812.80	2,828.72	2,787.72	7.34	7.47	-107.85	-155.72	-132.23	158.79	144.34	14.45	10.989		
2,900.00	2,864.98	2,882.17	2,834.13	7.73	7.88	-106.34	-174.48	-150.94	176.67	161.48	15.19	11.633		
3,000.00	2,955.93	2,976.81	2,916.09	8.43	8.65	-104.18	-208.00	-184.36	208.21	191.68	16.54	12.589		
3,100.00	3,046.87	3,071.46	2,998.05	9.17	9.45	-102.59	-241.51	-217.78	239.96	222.02	17.94	13.375		
3,200.00	3,137.82	3,166.10	3,080.01	9.93	10.28	-101.36	-275.02	-251.20	271.83	252.44	19.39	14.022		
3,300.00	3,228.77	3,260.74	3,161.97	10.71	11.14	-100.40	-308.54	-284.62	303.79	282.93	20.86	14.560		
3,400.00	3,319.72	3,355.39	3,243.93	11.51	12.01	-99.62	-342.05	-318.04	335.81	313.44	22.37	15.011		
3,500.00	3,410.67	3,450.03	3,325.89	12.33	12.89	-98.97	-375.57	-351.45	367.88	343.98	23.90	15.393		
3,600.00	3,501.62	3,544.67	3,407.85	13.15	13.78	-98.43	-409.08	-384.87	399.99	374.54	25.45	15.718		
3,650.12	3,547.20	3,592.11	3,448.92	13.57	14.24	-98.19	-425.88	-401.62	416.09	389.86	26.23	15.864		
3,700.00	3,592.79	3,639.32	3,489.81	13.93	14.69	-98.31	-442.60	-418.29	432.05	405.06	26.99	16.007		
3,800.00	3,685.45	3,733.92	3,571.73	14.55	15.60	-98.18	-476.10	-451.70	463.66	435.27	28.38	16.335		
3,900.00	3,779.67	3,828.31	3,653.47	15.12	16.51	-97.64	-509.52	-485.02	494.85	465.15	29.70	16.661		
4,000.00	3,875.26	3,922.30	3,734.86	15.63	17.43	-96.78	-542.80	-518.21	525.82	494.90	30.92	17.004		
4,100.00	3,972.03	4,015.72	3,815.76	16.07	18.34	-95.65	-575.88	-551.20	556.80	524.75	32.04	17.377		
4,200.00	4,069.82	4,108.38	3,896.01	16.46	19.25	-94.33	-608.70	-583.92	588.03	554.99	33.04	17.795		
4,300.00	4,168.42	4,200.12	3,975.45	16.79	20.16	-92.84	-641.18	-616.31	619.81	585.89	33.92	18.270		
4,400.00	4,267.65	4,290.75	4,053.94	17.05	21.05	-91.25	-673.28	-648.31	652.43	617.75	34.68	18.813		
4,500.00	4,367.32	4,380.11	4,131.32	17.26	21.94	-89.60	-704.92	-679.87	686.18	650.87	35.31	19.432		
4,600.00	4,467.25	4,468.03	4,207.45	17.41	22.81	-87.91	-736.05	-710.91	721.35	685.53	35.82	20.137		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

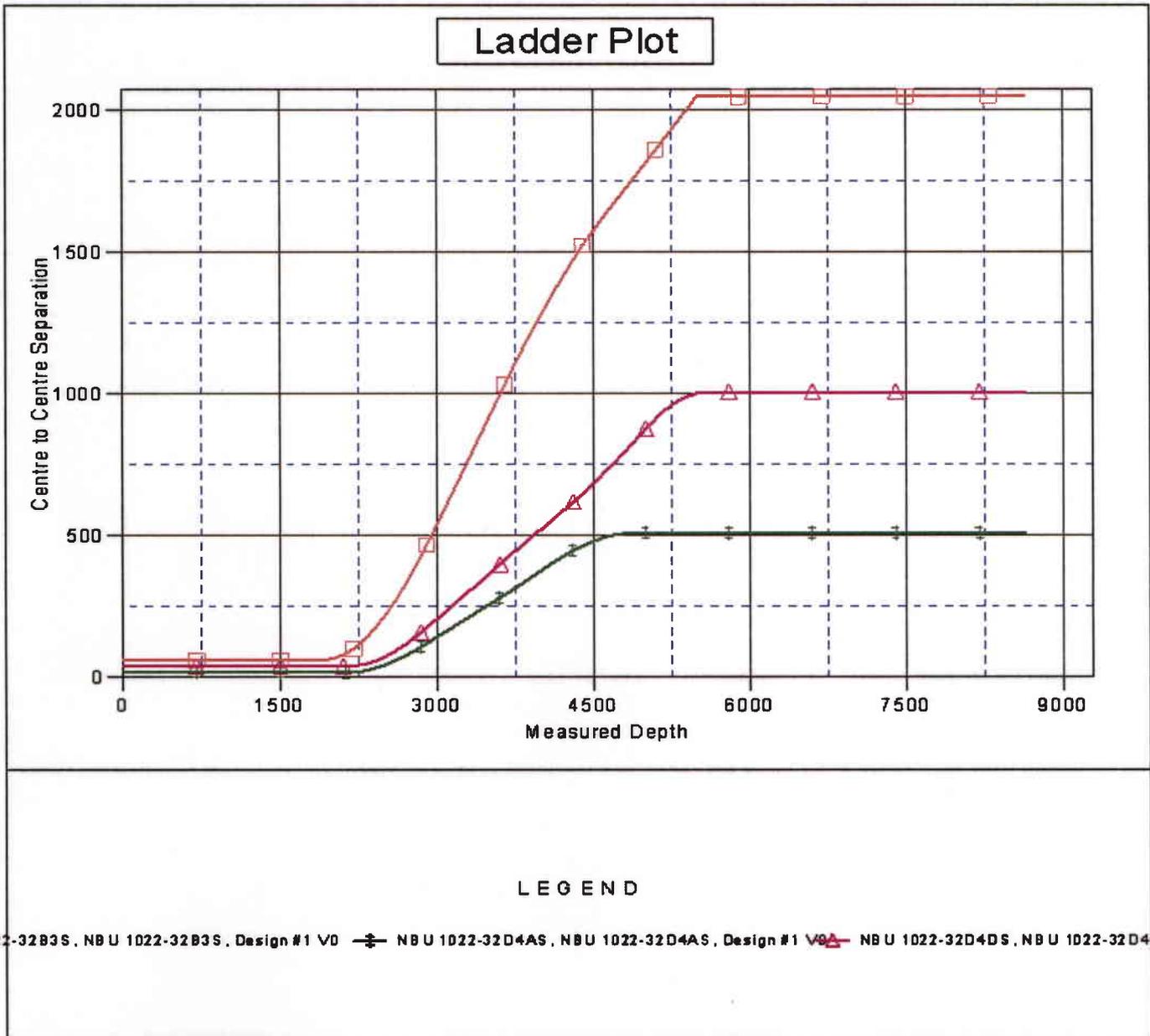
Company: ANADARKO PETROLEUM CORP.
Project: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
Reference Site: ANADARKO 1022-32C PAD
Site Error: 0.00ft
Reference Well: NBU 1022-32D1S
Well Error: 0.00ft
Reference Wellbore: NBU 1022-32D1S
Reference Design: Design #1

Local Co-ordinate Reference: Well NBU 1022-32D1S
TVD Reference: WELL @ 5467.00ft (Original Well Elev)
MD Reference: WELL @ 5467.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 2003.21 Single User Db
Offset TVD Reference: Offset Datum

Offset Design ANADARKO 1022-32C PAD - NBU 1022-32D4DS - NBU 1022-32D4DS - Design #1													Offset Site Error:	0.00ft
Survey Program: 0-MWD													Offset Well Error:	0.00ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
4,632.75	4,500.00	4,496.48	4,232.09	17.45	23.10	177.74	-746.12	-720.95	733.23	697.26	35.96	20.388		
4,700.00	4,567.25	4,554.71	4,282.52	17.53	23.68	179.48	-766.75	-741.52	758.14	722.04	36.11	20.997		
4,800.00	4,667.25	4,641.31	4,357.52	17.65	24.54	-178.11	-797.41	-772.09	796.39	760.08	36.31	21.935		
4,900.00	4,767.25	4,727.91	4,432.51	17.77	25.40	-175.90	-828.08	-802.67	835.87	799.38	36.49	22.910		
5,000.00	4,867.25	4,821.09	4,513.24	17.90	26.31	-173.72	-861.02	-835.52	876.39	839.74	36.64	23.917		
5,100.00	4,967.25	4,966.48	4,642.40	18.03	27.44	-170.93	-908.23	-882.60	914.44	877.71	36.73	24.898		
5,200.00	5,067.25	5,123.02	4,786.71	18.16	28.41	-168.68	-951.12	-925.37	947.09	910.26	36.83	25.714		
5,300.00	5,167.25	5,289.72	4,945.26	18.29	29.26	-166.97	-987.44	-961.58	973.37	936.37	37.01	26.301		
5,400.00	5,267.25	5,464.82	5,115.96	18.43	29.93	-165.77	-1,014.89	-988.95	992.45	955.20	37.25	26.641		
5,500.00	5,367.25	5,645.86	5,295.40	18.56	30.37	-165.08	-1,031.51	-1,005.53	1,003.69	966.14	37.54	26.734		
5,600.00	5,467.25	5,817.89	5,467.25	18.70	30.60	-164.90	-1,036.13	-1,010.14	1,006.77	968.90	37.87	26.584		
5,700.00	5,567.25	5,917.89	5,567.25	18.84	30.68	-164.90	-1,036.13	-1,010.14	1,006.77	968.64	38.13	26.402		
5,800.00	5,667.25	6,017.89	5,667.25	18.98	30.76	-164.90	-1,036.13	-1,010.14	1,006.77	968.37	38.40	26.218		
5,900.00	5,767.25	6,117.89	5,767.25	19.12	30.84	-164.90	-1,036.13	-1,010.14	1,006.77	968.10	38.67	26.034		
6,000.00	5,867.25	6,217.89	5,867.25	19.27	30.92	-164.90	-1,036.13	-1,010.14	1,006.77	967.82	38.95	25.851		
6,100.00	5,967.25	6,317.89	5,967.25	19.41	31.00	-164.90	-1,036.13	-1,010.14	1,006.77	967.55	39.22	25.668		
6,200.00	6,067.25	6,417.89	6,067.25	19.56	31.09	-164.90	-1,036.13	-1,010.14	1,006.77	967.27	39.50	25.486		
6,300.00	6,167.25	6,517.89	6,167.25	19.71	31.17	-164.90	-1,036.13	-1,010.14	1,006.77	966.98	39.79	25.304		
6,400.00	6,267.25	6,617.89	6,267.25	19.86	31.26	-164.90	-1,036.13	-1,010.14	1,006.77	966.70	40.07	25.123		
6,500.00	6,367.25	6,717.89	6,367.25	20.01	31.35	-164.90	-1,036.13	-1,010.14	1,006.77	966.41	40.36	24.942		
6,600.00	6,467.25	6,817.89	6,467.25	20.17	31.44	-164.90	-1,036.13	-1,010.14	1,006.77	966.11	40.66	24.763		
6,700.00	6,567.25	6,917.89	6,567.25	20.32	31.53	-164.90	-1,036.13	-1,010.14	1,006.77	965.82	40.95	24.584		
6,800.00	6,667.25	7,017.89	6,667.25	20.48	31.63	-164.90	-1,036.13	-1,010.14	1,006.77	965.52	41.25	24.406		
6,900.00	6,767.25	7,117.89	6,767.25	20.63	31.72	-164.90	-1,036.13	-1,010.14	1,006.77	965.22	41.55	24.230		
7,000.00	6,867.25	7,217.89	6,867.25	20.79	31.82	-164.90	-1,036.13	-1,010.14	1,006.77	964.92	41.85	24.054		
7,100.00	6,967.25	7,317.89	6,967.25	20.95	31.91	-164.90	-1,036.13	-1,010.14	1,006.77	964.61	42.16	23.879		
7,200.00	7,067.25	7,417.89	7,067.25	21.11	32.01	-164.90	-1,036.13	-1,010.14	1,006.77	964.30	42.47	23.706		
7,300.00	7,167.25	7,517.89	7,167.25	21.27	32.11	-164.90	-1,036.13	-1,010.14	1,006.77	963.99	42.78	23.533		
7,400.00	7,267.25	7,617.89	7,267.25	21.43	32.21	-164.90	-1,036.13	-1,010.14	1,006.77	963.68	43.09	23.362		
7,500.00	7,367.25	7,717.89	7,367.25	21.60	32.32	-164.90	-1,036.13	-1,010.14	1,006.77	963.36	43.41	23.192		
7,600.00	7,467.25	7,817.89	7,467.25	21.76	32.42	-164.90	-1,036.13	-1,010.14	1,006.77	963.04	43.73	23.023		
7,700.00	7,567.25	7,917.89	7,567.25	21.93	32.52	-164.90	-1,036.13	-1,010.14	1,006.77	962.72	44.05	22.856		
7,800.00	7,667.25	8,017.89	7,667.25	22.10	32.63	-164.90	-1,036.13	-1,010.14	1,006.77	962.40	44.37	22.689		
7,900.00	7,767.25	8,117.89	7,767.25	22.27	32.74	-164.90	-1,036.13	-1,010.14	1,006.77	962.07	44.70	22.524		
8,000.00	7,867.25	8,217.89	7,867.25	22.43	32.84	-164.90	-1,036.13	-1,010.14	1,006.77	961.75	45.02	22.361		
8,100.00	7,967.25	8,317.89	7,967.25	22.60	32.95	-164.90	-1,036.13	-1,010.14	1,006.77	961.42	45.35	22.199		
8,200.00	8,067.25	8,417.89	8,067.25	22.78	33.06	-164.90	-1,036.13	-1,010.14	1,006.77	961.09	45.68	22.038		
8,300.00	8,167.25	8,517.89	8,167.25	22.95	33.18	-164.90	-1,036.13	-1,010.14	1,006.77	960.75	46.02	21.878		
8,400.00	8,267.25	8,617.89	8,267.25	23.12	33.29	-164.90	-1,036.13	-1,010.14	1,006.77	960.42	46.35	21.720		
8,500.00	8,367.25	8,717.89	8,367.25	23.29	33.40	-164.90	-1,036.13	-1,010.14	1,006.77	960.08	46.69	21.563		
8,600.00	8,467.25	8,817.89	8,467.25	23.47	33.52	-164.90	-1,036.13	-1,010.14	1,006.77	959.74	47.03	21.408		
8,632.75	8,500.00	8,850.64	8,500.00	23.53	33.56	-164.90	-1,036.13	-1,010.14	1,006.77	959.63	47.14	21.357		

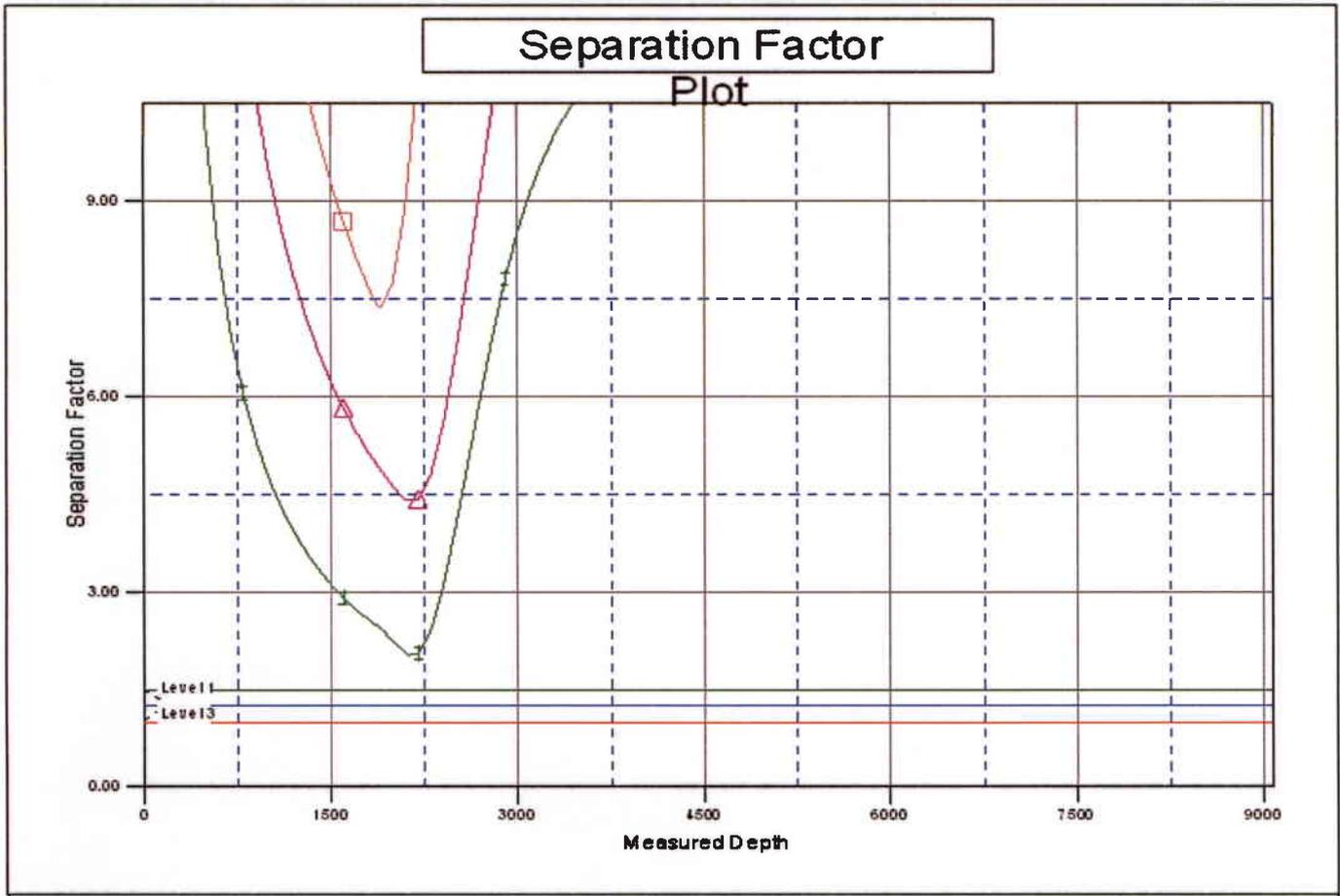
Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 1022-32D1S
Project:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	TVD Reference:	WELL @ 5467.00ft (Original Well Elev)
Reference Site:	ANADARKO 1022-32C PAD	MD Reference:	WELL @ 5467.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 1022-32D1S	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 1022-32D1S	Database:	EDM 2003.21 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5467.00ft (Original Well Elev) Coordinates are relative to: NBU 1022-32D1S
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302
 Central Meridian is 111° 30' 0.000 W ° Grid Convergence at Surface is: 1.30°



Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 1022-32D1S
Project:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	TVD Reference:	WELL @ 5467.00ft (Original Well Elev)
Reference Site:	ANADARKO 1022-32C PAD	MD Reference:	WELL @ 5467.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 1022-32D1S	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 1022-32D1S	Database:	EDM 2003.21 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5467.00ft (Original Well Elev) Coordinates are relative to: NBU 1022-32D1S
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302
 Central Meridian is 111° 30' 0.000 W° Grid Convergence at Surface is: 1.30°



L E G E N D

122-32B3S, NBU 1022-32B3S, Design #1 VD NBU 1022-32D4AS, NBU 1022-32D4AS, Design #1 NBU 1022-32D4DS, NBU 1022-32D4D

Kerr-McGee Oil & Gas Onshore LP
NBU #1022-32B3S, #1022-32D4DS,
#1022-32D4AS & #1022-32D1S
SECTION 32, 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, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 11.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 9.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.15 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 52.75 MILES.

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-32B3S, #1022-32D4DS,

#1022-32D4AS & #1022-32D1S

LOCATED IN UINTAH COUNTY, UTAH

SECTION 32, T10S, R22E, S.L.B.&M.

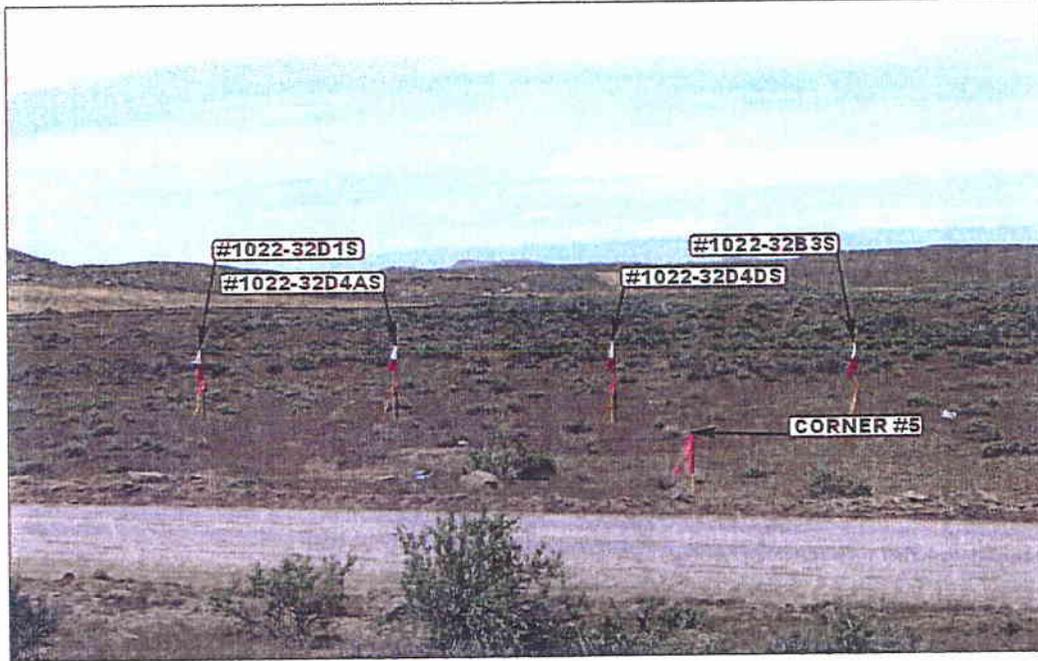


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY

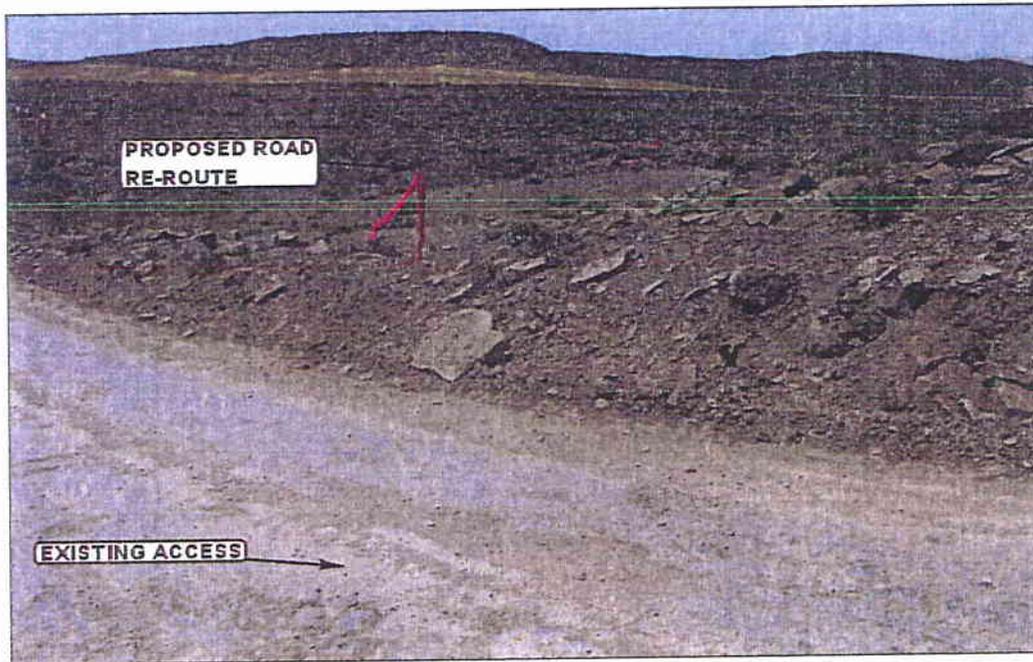


PHOTO: VIEW FROM BEGINNING OF PROPOSED ROAD RE-ROUTE

CAMERA ANGLE: NORTHWESTERLY



Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

06 04 08
MONTH DAY YEAR

PHOTO

TAKEN BY: D.K.

DRAWN BY: Z.L.

REVISED: 00-00-00

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-32B3S, #1022-32D4DS,
#1022-32D4AS & #1022-32D1S

LOCATED IN UINTAH COUNTY, UTAH
SECTION 32, T10S, R22E, S.L.B.&M.

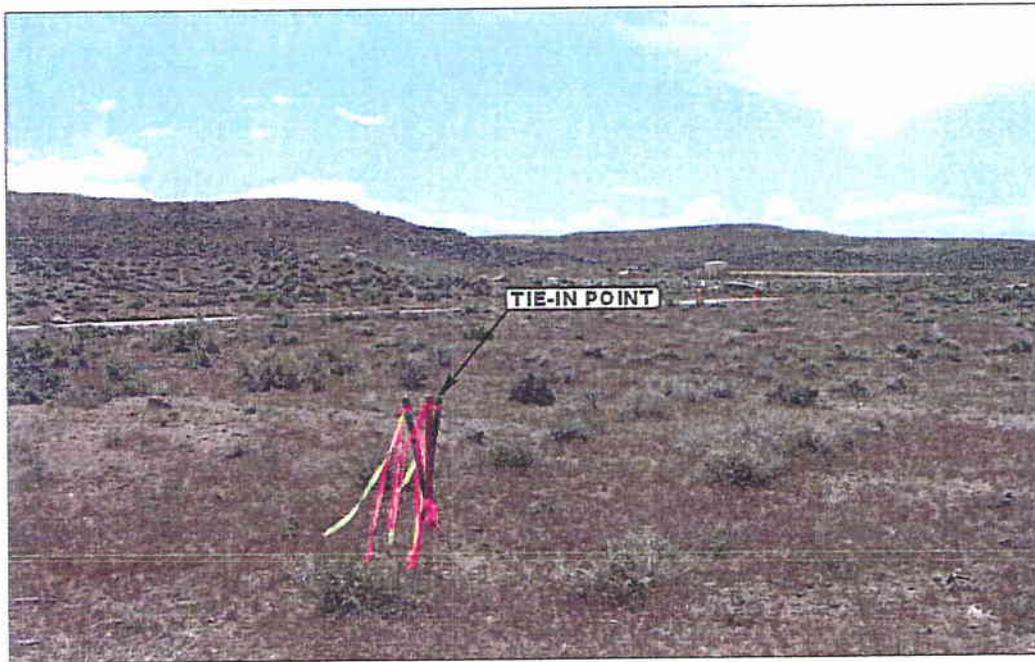


PHOTO: VIEW OF TIE-IN POINT

CAMERA ANGLE: SOUTHWESTERLY



U
E
L
S

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

- Since 1964 -

PIPELINE PHOTOS

06 04 08
MONTH DAY YEAR

PHOTO

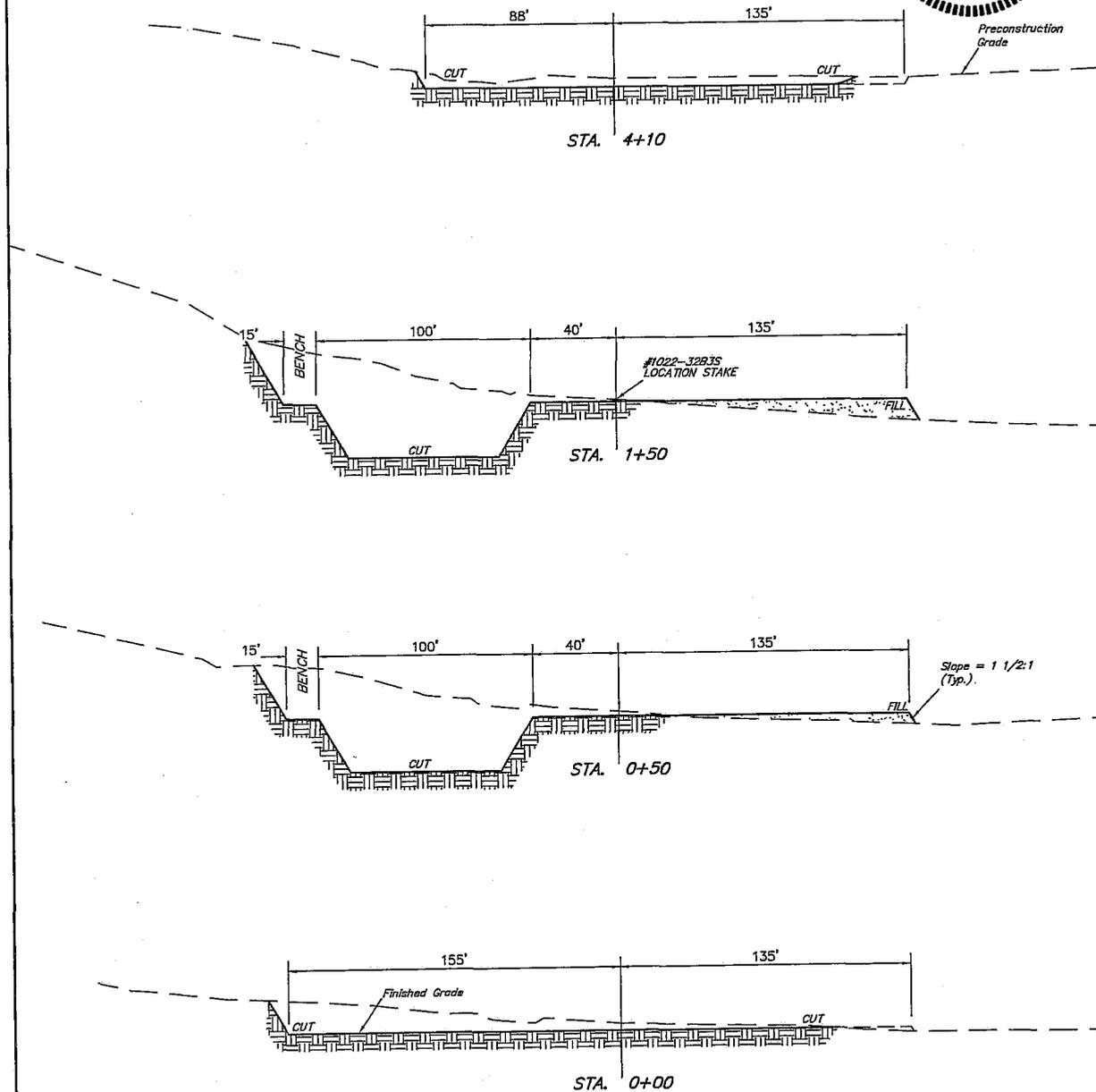
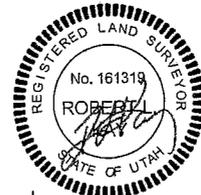
TAKEN BY: D.K. | DRAWN BY: Z.L. | REVISED: 00-00-00

Kerr-McGee Oil & Gas Onshore LP

FIGURE #2

TYPICAL CROSS SECTIONS FOR
 NBU #1022-32B3S, #1022-32D4DS,
 #1022-32D4AS & #1022-32D1S
 SECTION 32, T10S, R22E, S.L.B.&M.
 NE 1/4 NW 1/4

1" = 20'
 X-Section
 Scale
 1" = 50'
 DATE: 05-29-08
 Drawn By: C.C.



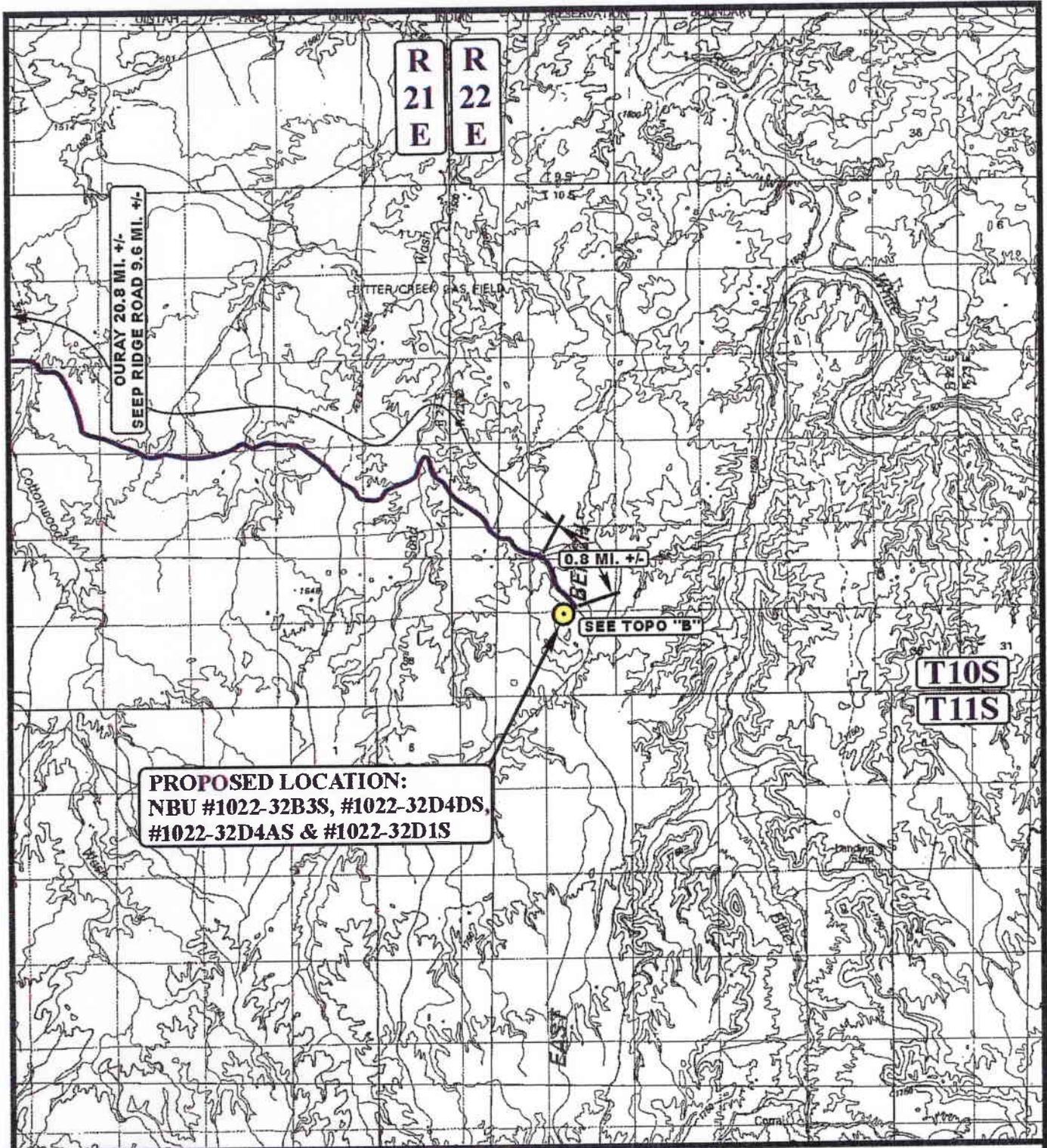
NOTE:
 Topsoil should not be Stripped Below Finished Grade on Substructure Area.

* NOTE:
 FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT
 (6") Topsoil Stripping = 2,260 Cu. Yds.
 Remaining Location = 13,830 Cu. Yds.
TOTAL CUT = 16,090 CU.YDS.
FILL = 3,200 CU.YDS.

EXCESS MATERIAL = 12,890 Cu. Yds.
 Topsoil & Pit Backfill (1/2 Pit Vol.) = 5,330 Cu. Yds.
 EXCESS UNBALANCE = 7,560 Cu. Yds.
 (After Interim Rehabilitation)



PROPOSED LOCATION:
 NBU #1022-32B3S, #1022-32D4DS,
 #1022-32D4AS & #1022-32D1S

LEGEND:

 PROPOSED LOCATION



Kerr-McGee Oil & Gas Onshore LP

NBU #1022-32B3S, #1022-32D4DS,
 #1022-32D4AS & #1022-32D1S
 SECTION 32, T10S, R22E, S.L.B.&M.
 NE 1/4 NVV 1/4



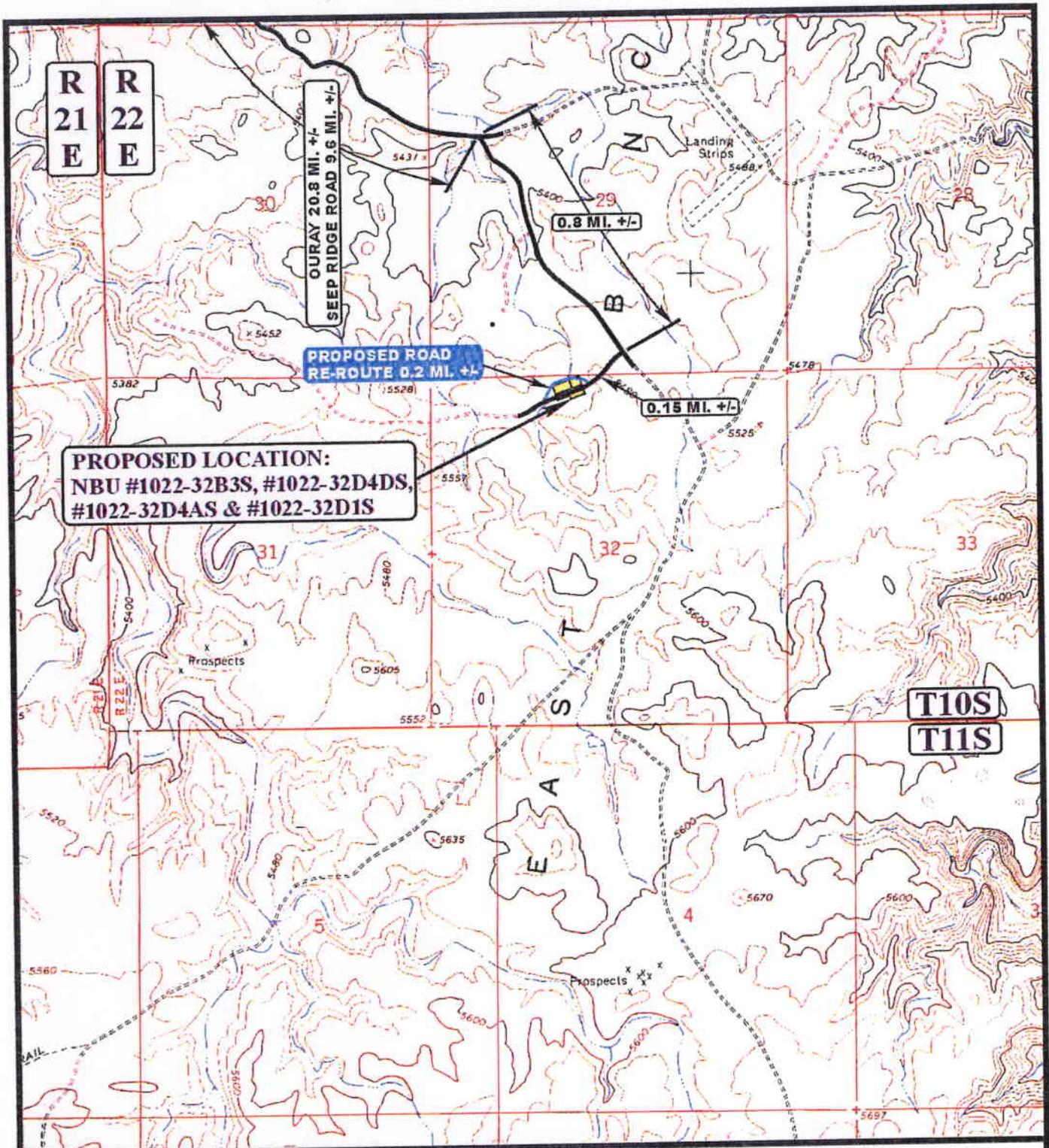
Utah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

**TOPOGRAPHIC
 MAP**

06 04 08
 MONTH DAY YEAR

SCALE: 1:100,000 | DRAWN BY: Z.L. | REVISED: 00-00-00





PROPOSED LOCATION:
 NBU #1022-32B3S, #1022-32D4DS,
 #1022-32D4AS & #1022-32D1S

T10S
T11S

LEGEND:

————— EXISTING ROAD
 - - - - - PROPOSED ACCESS ROAD

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-32B3S, #1022-32D4DS,
 #1022-32D4AS & #1022-32D1S
 SECTION 32, T10S, R22E, S.L.B.&M.
 NE 1/4 NW 1/4



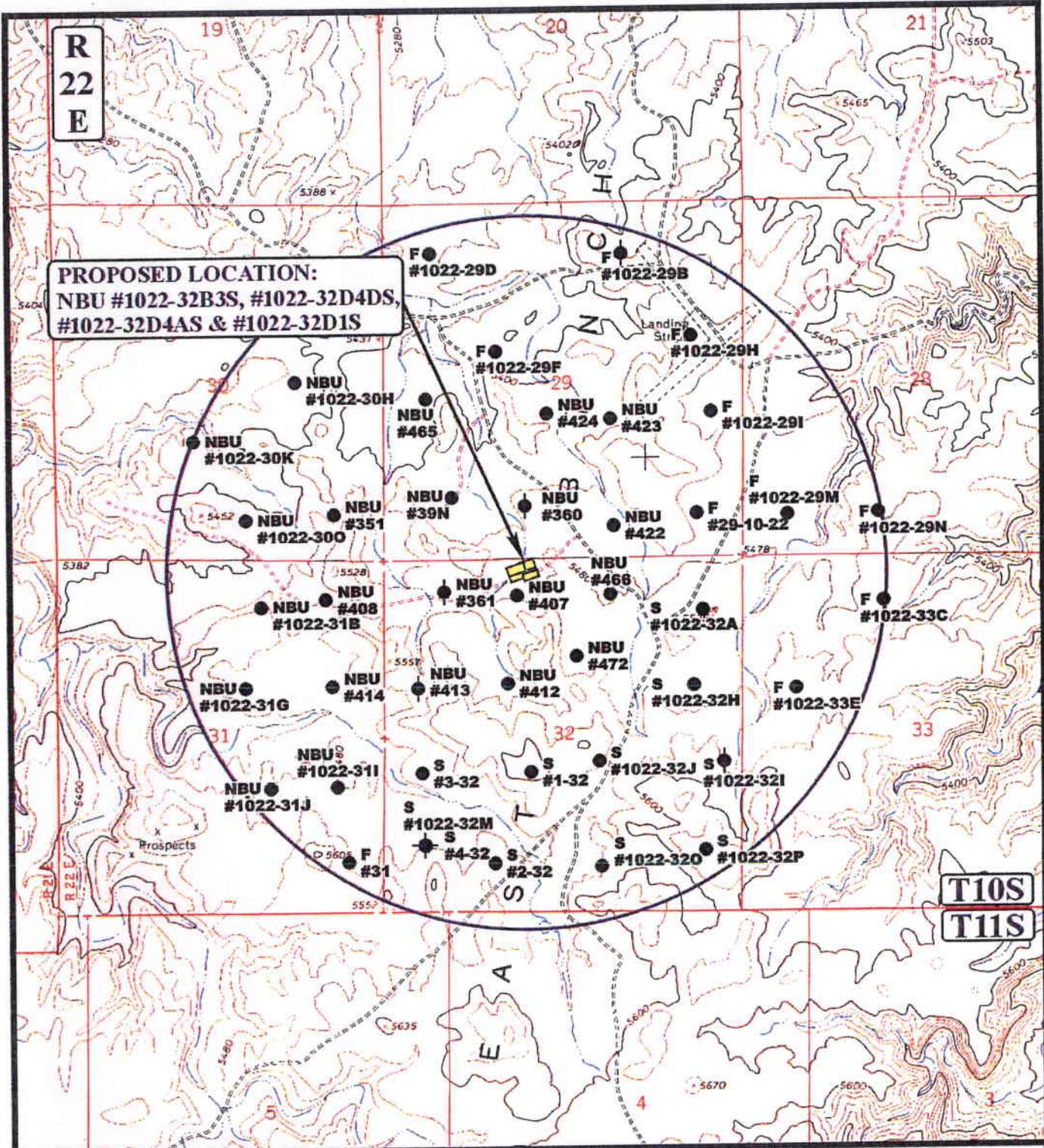
Utah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC
MAP

06 04 08
 MONTH DAY YEAR

B
TOPO

SCALE: 1" = 2000' DRAWN BY: Z.L. REVISED: 00-00-00



PROPOSED LOCATION:
 NBU #1022-32B3S, #1022-32D4DS,
 #1022-32D4AS & #1022-32D1S

LEGEND:

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

Kerr-McGee Oil & Gas Onshore LP

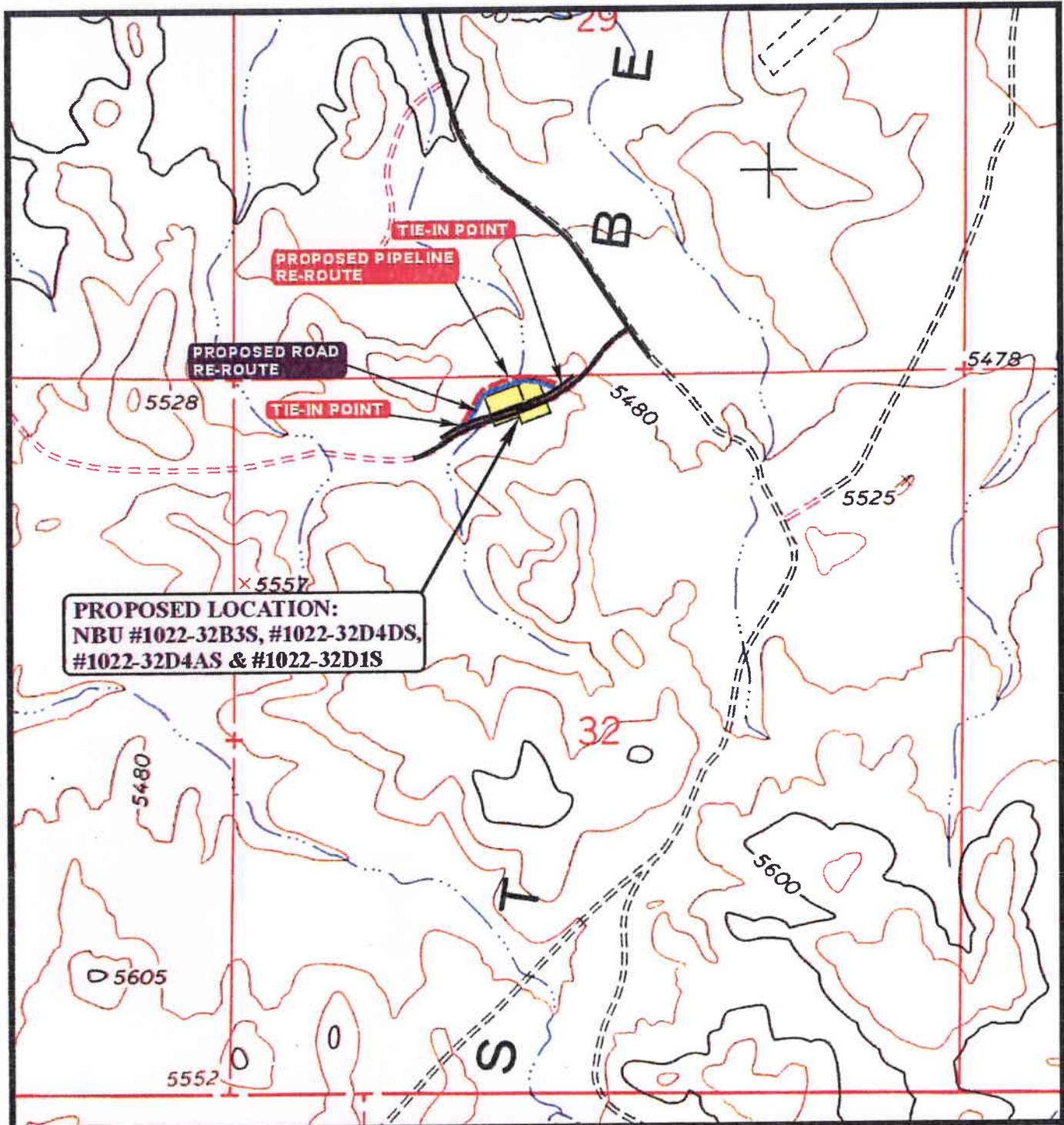
NBU #1022-32B3S, #1022-32D4DS,
 #1022-32D4AS & #1022-32D1S
 SECTION 32, T10S, R22E, S.L.B.&M.
 NE 1/4 NW 1/4

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



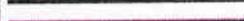
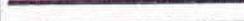
TOPOGRAPHIC MAP
 06 04 08
 MONTH DAY YEAR
 SCALE: 1" = 2000' DRAWN BY: Z.L. REVISED: 00-00-00

C
 TOPO



APPROXIMATE TOTAL PIPELINE RE-ROUTE DISTANCE = 1,019' +/-

LEGEND:

-  PROPOSED ACCESS ROAD
-  EXISTING PIPELINE
-  PROPOSED PIPELINE

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-32B3S, #1022-32D4DS,
 #1022-32D4AS & #1022-32D1S
 SECTION 32, T10S, R22E, S.L.B.&M.
 NE 1/4 NW 1/4

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



TOPOGRAPHIC MAP 06 04 08
 MONTH DAY YEAR
 SCALE: 1" = 1000' DRAWN BY: Z.L. REVISED: 00-00-00 **D TOPO**

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 07/08/2008

API NO. ASSIGNED: 43-047-40204

WELL NAME: NBU 1022-32D1S
 OPERATOR: KERR-MCGEE OIL & GAS (N2995)
 CONTACT: KEVIN MCINTYRE

PHONE NUMBER: 720-929-6226

PROPOSED LOCATION:

NW New
 NENW 32 100S 220E
 SURFACE: 0205 FNL 2058 FWL
 BOTTOM: 0270 FNL 1310 FWL
 COUNTY: UINTAH
 LATITUDE: 39.91199 LONGITUDE: -109.4648
 UTM SURF EASTINGS: 631222 NORTHINGS: 4418908
 FIELD NAME: NATURAL BUTTES (630)

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	DKO	9/16/08
Geology		
Surface		

LEASE TYPE: 3 - State
 LEASE NUMBER: ST ML 22798
 SURFACE OWNER: 3 - State

PROPOSED FORMATION: WSMVD
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[] Ind[] Sta[] Fee[]
(No. 22013542)
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit
(No. 43-8496)
- RDCC Review (Y/N)
(Date: _____)
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

- R649-2-3.
- Unit: NATURAL BUTTES
- R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit
Board Cause No: 173-14
Eff Date: 12-2-1999
Siting: 460' from u. bed of E. unconform. Trace
- R649-3-11. Directional Drill

COMMENTS:

Needs Permit (00-18-05)

STIPULATIONS:

- 1 - STATEMENT OF BASIS*
- 2 - OIL SHALE*
- 3 - Surface Csg Cont Strip*

Application for Permit to Drill

Statement of Basis

8/20/2008

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
871	43-047-40204-00-00		GW	S	No
Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.		Surface Owner-APD		
Well Name	NBU 1022-32D1S	Unit			
Field	UNDESIGNATED	Type of Work			
Location	NENW 32 10S 22E S 205 FNL 2058 FWL GPS Coord (UTM) 631222E 4418908N				

Geologic Statement of Basis

Kerr McGee proposes to set 1,800' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,400'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 32. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill
APD Evaluator

8/20/2008
Date / Time

Surface Statement of Basis

This location is in the East Bench area of the Natural Buttes Unit approximately 20.8 road miles southeast of Ouray, Ut.. It is accessed by the Seep Ridge Road, Uintah County roads and existing or planned oil field development roads to within 0.2 mile of the site, which will require new or re-construction.

The general area is within an unnamed drainage between Sand Wash and Bitter Creek. This un-named wash drains northerly to the White River a distance of approximately 7 miles. The area is characterized by rolling hills, which are frequently divided by somewhat gentle draws. This unnamed wash is an ephemeral drainage. No springs, seeps or streams exist in the area. An occasional pond constructed to supply water for cattle and antelope exists. The washes are sometimes rimmed with steep side hills, which have exposed sand stone bedrock cliffs along the rims.

Four gas wells are proposed on this pad. The location is on the out-slope of a lower level bench. Higher benches and a ridge are to the south. The pad will be constructed by excavating into the toe of the slope to the south, with the fill moved to the north into an open wide swale. Drainages intersect the site on both the east and west. These drainages are planned for re-routing around the pad. The selected site has no apparent concerns for constructing a pad, drilling and operating the planned wells and is the best location in the immediate area.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA reviewed the site and had no concerns regarding the proposal.

Ben Williams of the Utah Division of Wildlife Resources was invited the pre-site visit and did not attend

Floyd Bartlett
Onsite Evaluator

6/18/2008
Date / Time

Application for Permit to Drill

Statement of Basis

8/20/2008

Utah Division of Oil, Gas and Mining

Page 2

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.
Well Name NBU 1022-32D1S
API Number 43-047-40204-0 **APD No** 871 **Field/Unit** UNDESIGNATED
Location: 1/4,1/4 NENW **Sec** 32 **Tw** 10S **Rng** 22E 205 FNL 2058 FWL
GPS Coord (UTM) 631211 4418923 **Surface Owner**

Participants

Floyd Bartlett and David Hackford (DOGM), Jim Davis (SITLA), Raleen White, Kevin McIntyre, Clay Einerson and Tony Kzneck (Kerr McGee) and David Kay (Uintah Engineering and Land Surveying).

Regional/Local Setting & Topography

This location is in the East Bench area of the Natural Buttes Unit approximately 20.8 road miles southeast of Ouray, Ut.. It is accessed by the Seep Ridge Road, Uintah County roads and existing or planned oil field development roads to within 0.2 mile of the site, which will require new or re-construction.

The general area is within an unnamed drainage between Sand Wash and Bitter Creek. This un-named wash drains northerly to the White River a distance of approximately 7 miles. The area is characterized by rolling hills, which are frequently divided by somewhat gentle draws. This unnamed wash is an ephemeral drainage. No springs, seeps or streams exist in the area. An occasional pond constructed to supply water for cattle and antelope exists. The washes are sometimes rimmed with steep side hills, which have exposed sand stone bedrock cliffs along the rims.

Four gas wells are proposed on this pad. The location is on the out-slope of a lower level bench. Higher benches and a ridge are to the south. The pad will be constructed by excavating into the toe of the slope to the south, with the fill moved to the north into an open wide swale. Drainages intersect the site on both the east and west. These drainages are planned for re-routing around the pad. The selected site has no apparent concerns for constructing a pad, drilling and operating the planned wells and is the best location in the immediate area.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA reviewed the site and had no concerns regarding the proposal.

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Surface Use Plan

Current Surface Use

Grazing
Recreational
Wildlfe Habitat

New Road

Miles	Well Pad		Src Const Material	Surface Formation
0.2	Width 291	Length 350	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Vegetation is a salt desert shrub type. Principal species present are cheatgrass, prickly pear, horsebrush, greasewood, bottle brush, globemallow, shadscale, Indian ricegrass, Russian thistle, halogeton, pepper grass and curly mesquite grass.

Cattle, antelope and small mammals and birds.

Soil Type and Characteristics

Soils are a shallow sandy loam with some exposed rock..

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required Y

Drainages intersect the site on both the east and west. These drainages are planned for re-routing around the pad.

Berm Required? N

Erosion Sedimentation Control Required? N

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

Reserve Pit

Site-Specific Factors		Site Ranking	
Distance to Groundwater (feet)	>200	0	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)	<300	20	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)	<10	0	
Affected Populations	<10	0	
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	35	1 Sensitivity Level

Characteristics / Requirements

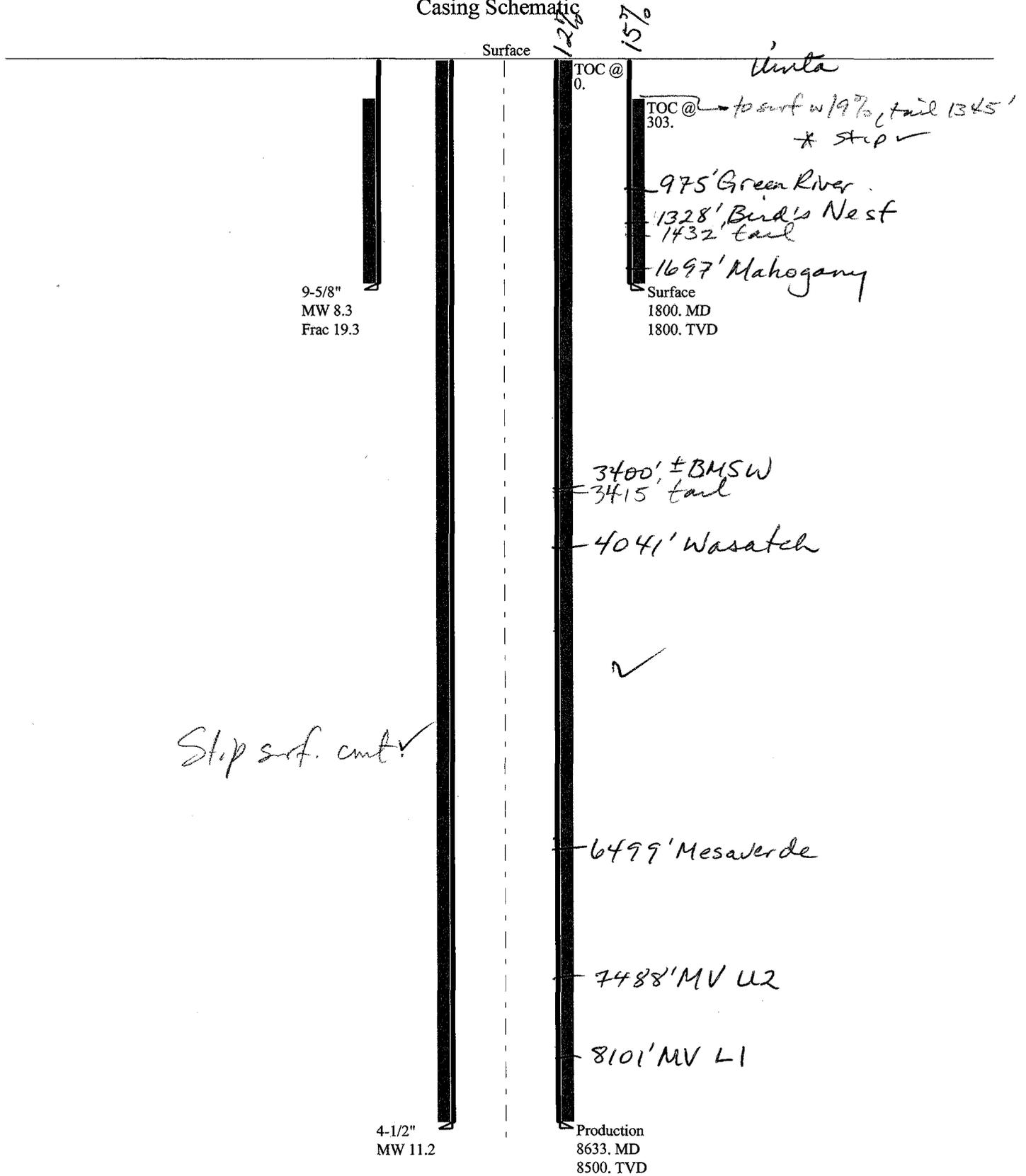
Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?** Y

Other Observations / Comments

Floyd Bartlett
Evaluator

6/18/2008
Date / Time

Casing Schematic



Well name:	43047402040000 NBU 1022-32D1S	
Operator:	Kerr McGee Oil & Gas Onshore L.P.	Project ID:
String type:	Surface	43-047-40204-0000
Location:	Uintah County, Utah	

Design parameters:

Collapse

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

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
 Surface temperature: 75 °F
 Bottom hole temperature: 100 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 1,300 ft
 Cement top: 303 ft

Burst

Max anticipated surface pressure: 1,584 psi
 Internal gradient: 0.120 psi/ft
 Calculated BHP 1,800 psi

No backup mud specified.

Tension:

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

Tension is based on buoyed weight.
 Neutral point: 1,578 ft

Completion type is subs
Non-directional string.

Re subsequent strings:

Next setting depth: 8,500 ft
 Next mud weight: 11.200 ppg
 Next setting BHP: 4,946 psi
 Fracture mud wt: 19.250 ppg
 Fracture depth: 1,800 ft
 Injection pressure: 1,800 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	1800	9.625	36.00	J-55	LT&C	1800	1800	8.796	781.3
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	779	2020	2.594	1800	3520	1.96	57	453	7.97 J

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

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

Date: September 15, 2008
 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 1800 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

43047402040000 NBU 1022-32D1SOperator: **Kerr McGee Oil & Gas Onshore L.P.**

String type: Production

Project ID:

43-047-40204-0000

Location: Uintah County, Utah

Design parameters:**Collapse**Mud weight: 11.200 ppg
Design is based on evacuated pipe.**Burst**Max anticipated surface
pressure: 3,076 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 4,946 psi

No backup mud specified.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

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

Tension is based on buoyed weight.

Neutral point: 7,210 ft

Environment:H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 194 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: Surface

Completion type is subs

Directional Info - Build & HoldKick-off point 1860 ft
Departure at shoe: 751 ft
Maximum dogleg: 2.5 °/100ft
Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft ³)
1	8633	4.5	11.60	I-80	LT&C	8500	8633	3.875	753.4
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	4946	6360	1.286	4946	7780	1.57	82	212	2.58 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & MineralsPhone: (801) 538-5357
FAX: (801) 359-3940Date: September 8, 2008
Salt Lake City, Utah**Remarks:**

Collapse is based on a vertical depth of 8500 ft, a mud weight of 11.2 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

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

BOPE REVIEW

Kerr-McGee NBU 1022-32D1S API 43-047-40204-0000

INPUT

Well Name

Kerr-McGee NBU 1022-32D1S API 43-047-40204-0000			
String 1	String 2		
Casing Size (")	9 5/8	4 1/2	
Setting Depth (TVD)	1800	8500	
Previous Shoe Setting Depth (TVD)	20	1800	
Max Mud Weight (ppg)	8.4	11.2	✓
BOPE Proposed (psi)	500	5000	
Casing Internal Yield (psi)	3520	7780	
Operators Max Anticipated Pressure (psi)	5270	11.9 ppg	✓

Calculations

String 1 9 5/8 "

Max BHP [psi]	.052*Setting Depth*MW =	786	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	570	NO <i>O.R.</i> Air Drill to surface shoe with diverter
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	390	YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	395	← NO <i>Reasonable Depth</i>
Required Casing/BOPE Test Pressure		1800 psi	
*Max Pressure Allowed @ Previous Casing Shoe =		20 psi	*Assumes 1psi/ft frac gradient

Calculations

String 2 4 1/2 "

Max BHP [psi]	.052*Setting Depth*MW =	4950	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	3930	YES ✓
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	3080	YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	3476	← NO <i>Reasonable</i>
Required Casing/BOPE Test Pressure		5000 psi	
*Max Pressure Allowed @ Previous Casing Shoe =		1800 psi	*Assumes 1psi/ft frac gradient

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)

July 15, 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 Wasatch/MesaVerde)

43-047-40184	NBU 921-30FT	Sec 30 T09S R21E 1585 FNL 2614 FWL
43-047-40185	NBU 921-31BT	Sec 31 T09S R21E 0670 FNL 2008 FEL
43-047-40170	NBU 921-27KT	Sec 27 T09S R21E 1527 FSL 1821 FWL
43-047-40171	NBU 921-27MT	Sec 27 T09S R21E 0634 FSL 0931 FWL
43-047-40172	NBU 921-27OT	Sec 27 T09S R21E 0646 FSL 2211 FEL
43-047-40173	NBU 921-27HT	Sec 27 T09S R21E 2025 FNL 0623 FEL
43-047-40174	NBU 921-27LT	Sec 27 T09S R21E 1954 FSL 0641 FWL
43-047-40175	NBU 921-33K	Sec 33 T09S R21E 2066 FSL 1926 FWL
43-047-40227	NBU 921-27C2D	Sec 27 T09S R21E 0650 FNL 1730 FWL
43-047-40203	NBU 921-27D2DS	Sec 27 T09S R21E 0660 FNL 1713 FWL
	BHL	Sec 27 T09S R21E 0395 FNL 0350 FWL
43-047-40202	NBU 921-27D2AS	Sec 27 T09S R21E 0640 FNL 1747 FWL
	BHL	Sec 27 T09S R21E 0050 FNL 0350 FWL
43-047-40201	NBU 921-27C2AS	Sec 27 T09S R21E 0630 FNL 1765 FWL
	BHL	Sec 27 T09S R21E 0300 FNL 1730 FWL
43-047-40169	NBU 921-26IT	Sec 26 T09S R21E 1964 FSL 0674 FEL
43-047-40176	NBU 922-29NT	Sec 29 T09S R22E 0845 FSL 1627 FWL
43-047-40177	NBU 922-29KT	Sec 29 T09S R22E 1795 FSL 1936 FWL
43-047-40178	NBU 922-31BT	Sec 31 T09S R22E 0888 FNL 2191 FEL

43-047-40179	NBU 922-32ET	Sec 32	T09S	R22E	2477	FNL	0094	FWL
43-047-40186	NBU 922-33OT	Sec 33	T09S	R22E	0692	FSL	1465	FEL
43-047-40187	NBU 922-33NT	Sec 33	T09S	R22E	0890	FSL	2291	FWL
43-047-40188	NBU 922-33IT	Sec 33	T09S	R22E	2115	FSL	0579	FEL
43-047-40191	NBU 1022-04GT	Sec 04	T10S	R22E	1897	FNL	1861	FEL
43-047-40189	NBU 922-35IT	Sec 35	T09S	R22E	2133	FSL	0627	FEL
43-047-40190	NBU 1022-01CT	Sec 01	T10S	R22E	0819	FNL	2106	FWL
43-047-40192	NBU 1022-08IT	Sec 08	T10S	R22E	1757	FSL	0323	FEL
43-047-40193	NBU 1022-08GT	Sec 08	T10S	R22E	2313	FNL	1922	FEL
43-047-40194	NBU 1022-09AT	Sec 09	T10S	R22E	0472	FNL	0582	FEL
43-047-40195	NBU 1022-10HT	Sec 10	T10S	R22E	1798	FNL	0297	FEL
43-047-40196	NBU 1022-10FT	Sec 10	T10S	R22E	2200	FNL	2094	FWL
43-047-40204	NBU 1022-32D1S	Sec 32	T10S	R22E	0205	FNL	2058	FWL
	BHL	Sec 32	T10S	R22E	0270	FNL	1310	FWL
43-047-40205	NBU 1022-32D4AS	Sec 32	T10S	R22E	0198	FNL	2077	FWL
	BHL	Sec 32	T10S	R22E	0760	FNL	1180	FWL
43-047-40206	NBU 1022-32B3S	Sec 32	T10S	R22E	0185	FNL	2114	FWL
	BHL	Sec 32	T10S	R22E	1150	FNL	2130	FEL
43-047-40207	NBU 1022-32D4DS	Sec 32	T10S	R22E	0192	FNL	2096	FWL
	BHL	Sec 32	T10S	R22E	1240	FNL	1050	FWL

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:7-15-08



Kerr-McGee Oil & Gas Onshore LP
1999 Broadway, Suite 3700
Denver, CO 80205

July 21, 2008

Mrs. 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 1022-32D1S
T10S-22E
Section 32: NWNW
Surface: 205' FNL, 2058' FWL
Bottom Hole: 270' FNL, 1310 FEL
Uintah County, Utah

Dear Mrs. Mason:

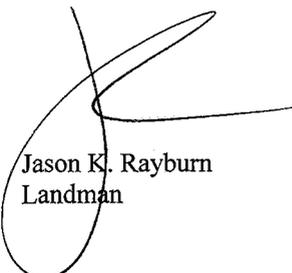
Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 1022-32D1S 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 and all of section 32 (State Lease UT ST ML 22798).

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



Jason K. Rayburn
Landman

RECEIVED
JUL 22 2008
DIV. OF OIL, GAS & MINING

From: Jim Davis
To: Bonner, Ed; Mason, Diana
Date: 10/23/2008 8:34 AM
Subject: A few more KMG approvals.

The following wells have been cleared by SITLA including arch and paleo clearance.

Kerr-McGee's NBU 1022-32D1S [API #4304740204]
Kerr-McGee's NBU 1022-32D4AS [API #4304740205]
Kerr-McGee's NBU 1022-32B3S [API #4304740206]
Kerr-McGee's NBU 1022-32D4DS [API #4304740207]

I've sent out three approval e-mails this morning. Sorry I didn't have them all grouped together- they've just been in a jumble on my desk.

-Jim

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



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

November 4, 2008

Kerr-McGee Oil & Gas Onshore, LP
P O Box 173779
Denver, CO 80217-3779

Re: NBU 1022-32D1S Well, 205' FNL, 2058' FWL, NE NW, Sec. 32, T. 10 South,
R. 22 East, Bottom Location 270' FNL, 1310' FWL, NW NW, Sec. 32, T. 10 South,
R. 22 East, Uintah County, Utah

Gentlemen:

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

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40204.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Uintah County Assessor
SITLA
Bureau of Land Management, Vernal Office



Operator: Kerr-McGee Oil & Gas Onshore, LP
Well Name & Number NBU 1022-32D1S
API Number: 43-047-40204
Lease: ST ML 22798

Location: NE NW Sec. 32 T. 10 South R. 22 East
Bottom Location: NW NW Sec. 32 T. 10 South R. 22 East

Conditions of Approval

1. General

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

2. Notification Requirements

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

- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
- 24 hours prior to spudding the well – contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

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

- Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
- Any changes to the approved drilling plan – contact Dustin Doucet

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

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

3. Reporting Requirements

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

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
6. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
7. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.
8. Surface casing shall be cemented to the surface.

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: Kerr-McGee Oil & Gas Onshore, LP.

Well Name: NBU 1022-32D1S

API No: 43-047-40204 Lease Type: State

Section 32 Township 10S Range 22E County Uintah

Drilling Contractor Pete Martin Drilling Rig # Bucket

SPUDDED:

Date 04/30/09

Time 08:00 AM

How Dry

Drilling will Commence: _____

Reported by Lew Weldon

Telephone # 435-781-7060

Date 05/05/2009 Signed RM

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 OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____			5. LEASE DESIGNATION AND SERIAL NUMBER: ST ML-22798
2. NAME OF OPERATOR: KERR MCGEE OIL & GAS ONSHORE LP			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078			7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
4. LOCATION OF WELL FOOTAGES AT SURFACE: 205'FNL, 2058'FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 32 10S 22E			8. WELL NAME and NUMBER: NBU 1022-32D1S
			9. API NUMBER: 4304740204
			10. 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 (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX.

SPUD WELL LOCATION ON 04/30/2009 AT 0800 HRS.

NAME (PLEASE PRINT) SHEILA UPCHEGO	TITLE REGULATORY ANALYST
SIGNATURE 	DATE 5/1/2009

(This space for State use only)

RECEIVED
MAY 18 2009

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22798
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 1022-32D1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047402040000
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: 0205 FNL 2058 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 32 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 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: 6/3/2009	<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.

MIRU PROPETRO AIR RIG ON 06/01/2009. DRILLED 12 1/4" SURFACE HOLE TO 1870'. RAN 9 5/8" 36# J-55 SURFACE CSG. PMP 160 SX HIFILL CLASS G @11.0 PPG 3.52 YIELD. PMP 350 SX PREM CLASS G @15.8 PPG 1.15 YIELD. DROP PLUG ON FLY DISPLACE W/134 BBLS OF H2O 200 LOFT AT 3.5 BBLS/MIN BUMP PLUG 800 PSI FLOAT HELD 5 BBLS LEAD TO SURFACE. PMP 100 SX PREM CLASS G @15.8 PPG 1.15 YIELD. DOWN 1" CMT TO SURFACE. WORT

Accepted by the
 Utah Division of
 Oil, Gas and Mining
FOR RECORD ONLY
 June 08, 2009

NAME (PLEASE PRINT) Sheila Upchego	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 6/5/2009	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22798
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 1022-32D1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047402040000
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: 0205 FNL 2058 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 32 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

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<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: 8/24/2009	<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
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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.

FINISHED DRILLING FROM 1870' TO 8800' ON 08/24/2009. RAN 4-1/2" 11.6# I-80 PRODUCTION CSG. CMT W/40 BBLS WATER. LEAD W/420 SX CLASS G @ 11.8 PPG, 2.38 YIELD. TAILED CMT W/1300 SX POZ PREM @ 14. PPG, 1.22 YIELD. DROP PLUG & DISPLACED W/135.4 BBLS WATER, BUM PLUG W/500 OVER FINAL CIRC PSI 2444. PLUG HELD & HAD FULL RETURN DURING CMT JOB & 27 BBLS WATER TO PIT. CLEAN MUD TANKS. RELEASE ENSIGN 139 RIG ON 08/25/2009 AT 21:00 HRS.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 August 26, 2009

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 8/26/2009

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22798
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: 43047402040000
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: 0205 FNL 2058 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 32 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 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: 1/9/2010	<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
	<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.
 THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 1/9/2010 AT 1:00 P.M. PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.

Accepted by the
 Utah Division of
 Oil, Gas and Mining
FOR RECORD ONLY
 January 11, 2010

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 1/11/2010

OPERATIONS REGION
Operation Summary Report

Well: NBU 1022-32D1S [GREEN]		Spud Conductor: 4/30/2009	Spud Date: 6/1/2009
Project: UTAH-UINTAH		Site: NBU 1022-32C PAD	Rig Name No: ENSIGN 139/139, PROPETRO/
Event: DRILLING		Start Date: 5/29/2009	End Date: 8/24/2009
Active Datum: RKB @5,463.00ft (above Mean Sea Level)		UWI: 0/10/S/22/E/32/0/NENW/6/PM/N/205.00/W/0/2,058.00/0/0	

Date	Time Start-End	Duration (H)	Phase	Code	Sub Code	PU	MD From (ft)	Operation
6/1/2009	9:30 - 15:00	5.50	DRLSUR	02	A	P		DRILL F 40'- 540' W/ AIR HAMMER AND AIR MIST
	15:00 - 15:30	0.50	DRLSUR	10	B	P		MULTISHOT SURVEY= .5 DEG 40.2 RAW AZI.
	15:30 - 20:30	5.00	DRLSUR	02	A	P		DRILL 540'- 780', W/ AIR HAMMER AND AIR MIST.
	20:30 - 21:00	0.50	DRLSUR	10	B	P		MULTISHOT SURVEY .6 DEG 60.2 RAW AZI
	21:00 - 0:00	3.00	DRLSUR	02	A	P		DRILL 780-930' W/ AIR HAMMER AND AIR MIST NO WATER AT THIS TIME
6/2/2009	0:00 - 3:00	3.00	DRLSUR	02	A	P		DRILL 930'-1050, W/ AIR HAMMER AND AIR MIST
	3:00 - 3:30	0.50	DRLSUR	10	B	P		SURVEY W/ MULTISHOT WIRELINE TOOL, 1020'= .9 DEG 87.6 RAW AZI
	3:30 - 19:30	16.00	DRLSUR	02	A	P		DRILL 1050'- 1870', W/ AIR HAMMER AND AIR MIST. TD SURFACE 6/2/2009 LD DS
	19:30 - 20:00	0.50	CSG	05	A	P		CIRC HOLE CLEAN W/ AIR.
	20:00 - 20:30	0.50	DRLSUR	10	B	P		SURVEY 1830'= .7 DEG 121.5 RAW AZI
	20:30 - 0:00	3.50	CSG	06	D	P		LAY DOWN DRILL STRING.
6/3/2009	0:00 - 1:00	1.00	CSG	06	D	P		LD BHA.
	1:00 - 3:30	2.50	CSG	12	C	P		RUN 42 JTS 9 5/8" 36#, J-55,LT&C CSG, TO 1834' GL, FLOAT @ 1790' GL.
	3:30 - 4:00	0.50	CSG	01	E	P		RIG DOWN PRO-PETRO RIG 9 AND RIG UP CEMENTERS.
	4:00 - 6:00	2.00	CSG	12	E	P		START W/ 40 BBLS OF FLUSH 8.3# H2O, PUMP 160 SX (108 BBLS) OF 11.0#, 3.52 YD, 23 GAL/SK OF HIGH FILL TYPE 2 LEAD , PUMP 350 SX(71 BBLS) OF 15.8#, 1.15 YD, 5 GAL/SK OF PREMIUM TAIL CEMENT , DROP PLUG ON FLY, DISPLACE W 134 BBLS OF H2O, 200 LIFT AT 3.5 BBLS/MIN, BUMP PLUG 800 PSI, FLOAT HELD. 5 BBLS LEAD TO SURFACE, FELL, PUMP 100 SX (20.5 BBLS) DOWN 1". 15.8# 1.15 YD, 5 GAL/SK.CEMENT TO SURFACE. RIG DOWN CEMENTERS
8/18/2009	10:00 - 12:00	2.00	MIRU	01	C	P		RDRT - SKID RIG TO NBU 1022-32D1S - RURT
	12:00 - 13:00	1.00	DRLPRO	14	A	P		N/UP BOPE
	13:00 - 17:00	4.00	DRLPRO	15	A	P		TEST BOP - RAMS, CHOKE, CHOKE LINE, FLOOR VALVES, IBOP 250 LOW 5000 HIGH, ANNULAR 250 LOW 2500 HIGH, CASING 1500 (PRE-SPUD RIG INSPECTION WHILE TEST BOP)
	17:00 - 17:30	0.50	DRLPRO	14	B	P		INSTALL WEARBUSHING
	17:30 - 21:00	3.50	DRLPRO	06	A	P		P/UP MM, BIT #1 & DIRECTIONAL BHA - SCRIBE & ORIENT DIRECTIONAL TOOLS - RIH - TAG CMT @ 1750'
	21:00 - 22:30	1.50	DRLPRO	02	F	P		DRILL CMT, FE & RATHOLE F/1750' TO 1884'
	22:30 - 0:00	1.50	DRLPRO	02	D	P		DRILL/SLIDE F/1884' TO 2064' - 180' @ 120' FPH - 8.4 MUD WT - VIS 27 - WOB 15 - TQ 5 - RPM 45 - MPRM 112 - 487 GPM.
8/19/2009	0:00 - 12:00	12.00	DRLPRO	02	D	P		DRILL - SLIDE F/ 2064 TO 3455 - 1391' @ 115.9 W/ 8.4 MUD WT VIS 26 - WOB 14/17 - RPM 45 MRPM 112 - TQ 9/5 - GPM 487
	12:00 - 12:30	0.50	DRLPRO	07	A	P		RIG SER
	12:30 - 0:00	11.50	DRLPRO	02	D	P		DRILL - SLIDE F/ 3455 TO 4690 - 1235' @ 107.3 FPH W/ 8.4 MUD WT VIS 26 - WOB 14/17 - RPM 45 MRPM 112 - TQ 9/5 - GPM 487
8/20/2009	0:00 - 15:30	15.50	DRLPRO	02	D	P		DRILL - SLIDE F/ 4690 TO 6019 - 1329' @ 85.7 FPH W/ 8.4 MUD WT VIS 27 - WOB 15/17 - RPM 45 - MRPM 112 - TQ 11/8 - GPM 487

RECEIVED January 11, 2010

OPERATION LOG								
Well: NBU 1022-32D1S [GREEN]			Spud Conductor: 4/30/2009			Spud Date: 6/1/2009		
Project: UTAH-UINTAH			Site: NBU 1022-32C PAD			Rig Name No: ENSIGN 139/139, PROPETRO/		
Event: DRILLING			Start Date: 5/29/2009			End Date: 8/24/2009		
Active Datum: RKB @5,463.00ft (above Mean Sea Level)			UWI: 0/10/S/22/E/32/O/NENW/6/PM/N/205.00/W/0/2,058.00/O/0					
Date	Time Interval	Duration (hr)	Phase	Code	Sub-Code	PSD	MD From (ft)	Operation
	15:30 - 16:00	0.50	DRLPRO	07	A	P		SER RIG
	16:00 - 0:00	8.00	DRLPRO	02	D	P		DRILL - SLIDE F/ 6019 TO 6343 - 324' @ 40.5 FPH W/ 9.5 PPG VIS 36 - WOB 16/19 - RPM 45 - MRPM 112 - TQ 16/20 - GPM 487
8/21/2009	0:00 - 18:30	18.50	DRLPRO	02	D	P		DRILL - SLIDE F/ 6343 TO 7190 - 847' @ 45.7' FPH W/ MUD WT 10.6 PPG VIS 42 - WOB 16/20 - RPM 45 - MRPM 112 - TQ 12/9 - GPM 487
	18:30 - 19:00	0.50	DRLPRO	07	A	P		SER RIG
	19:00 - 0:00	5.00	DRLPRO	02	D	P		DRILL-SLIDE F/ 7190 TO 7378 - 188' @ 37.6' FPH W/ 10.8 PPG MUD WT VIS 42 - WOB 18/21 - RPM 45 - MRPM 112 - TQ 13/10 - GPM 487
8/22/2009	0:00 - 15:30	15.50	DRLPRO	02	D	P		DRILL-SLIDE F/ 7378 TO 7918 - 540' @ 34.8 FPH W/ 10.9 PPG MUD WT VIS 42 - RPM 45 - MRPM 112 - TQ 13/10 - GPM 487
	15:30 - 16:00	0.50	DRLPRO	07	A	P		SER RIG
	16:00 - 0:00	8.00	DRLPRO	02	D	P		DRILL-SLIDE F/ 7918 TO 8155 - 237' @ 29.6 FPH W/ 11.3 PPG MUD WT VIS 42 - RPM 45 - MRPM 112 - TQ 13/10 - GPM 487
8/23/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL-SLIDE F/ 8155 TO 8282 - 127' @ 21.1 FPH W/ 11.3 PPG MUD WT VIS 43 - RPM 45 - MRPM 112 - TQ 13/10 - GPM 487
	6:00 - 11:00	5.00	DRLPRO	06	A	P		T.F.N.B MAX OVER PULL 260-280 K OVER FOR FIRST 3 STANDS PUMP DRY PILL - CONT. T.O.H
	11:00 - 12:00	1.00	DRLPRO	06	A	P		L/D DIR TOOLS & BIT MOTOR
	12:00 - 17:00	5.00	DRLPRO	06	A	P		P/U BIT - MOTOR - MONEL DC & T.I.H
	17:00 - 17:30	0.50	DRLPRO	03	E	P		WASH F/ 8226 TO 8282 (NO FILL)
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRILL F/ 8282 TO 8633 - 351' @ 54.0 FPH W/ 11.7 MUD WT VIS 42 - RPM 45 - MRPM 65 - WOB 12/15 - TQ 12/9 - GPM 462
8/24/2009	0:00 - 3:30	3.50	DRLPRO	02	D	P		DRILL F/ 8633 TO 8800 - 167' @ 47.7 FPH W/ 11.7 MUD WT VIS 42 - RPM 45 - MRPM 65 - TQ 12/9 GPM 462
	3:30 - 4:30	1.00	DRLPRO	05	A	P		CIRC BTM UP
	4:30 - 6:00	1.50	DRLPRO	06	E	P		10 STAND WIPER TRIP
	6:00 - 7:30	1.50	DRLPRO	05	A	P		CIRC BTM UP
	7:30 - 13:00	5.50	DRLPRO	06	B	P		PUMP SLUG & DROP SURVEY & L.D.D.P
	13:00 - 15:00	2.00	DRLPRO	08	A	P		REPAIR IRON ROUGH NECK
	15:00 - 17:30	2.50	DRLPRO	06	B	P		CONT.L.D.D.P & BHA
	17:30 - 18:00	0.50	DRLPRO	14	B	P		PULL WEAR BUSHING
	18:00 - 23:30	5.50	DRLPRO	11	D	P		HELD SAFETY MEETING R/U HALLIBURTON & RUN TRIPLE COMBO TO @ 8780 & HOLE DEPTH @ 8800
	23:30 - 0:00	0.50	DRLPRO	12	C	P		HELD SAFETY MEETING & R/U KIMZEY CASING & RUN 4 1/2 PROD. STRING
8/25/2009	0:00 - 6:00	6.00	DRLPRO	12	C	P		RUN 4 1/2 PROD STRING TO @ 7838
	6:00 - 10:30	4.50	DRLPRO	22	A	X		WORK STUCK PIPE @ 7838 & AFTER PULLING STERTCH ON PIPE STUCK @ 2984 & PUMPED 150 BBL WATER PILL WHICH COVER F/ 4064' TO SURFACE & TO RELEASE HYDROSTATIC ON WELL BORE FREED PIPE.
	10:30 - 11:30	1.00	DRLPRO	12	C	P		CONT TO RUN CASING & P/U L/D JT & CASING SHOE @ 8770 & FLOAT COLLAR @ 8728
	11:30 - 13:00	1.50	DRLPRO	05	D	P		CIRC BTM UP & DISPLACED WATER BACK TO THE RES PIT

RECEIVED January 11, 2010

OPERATION SUMMARY REPORT

Well: NBU 1022-32D1S [GREEN]	Spud Conductor: 4/30/2009	Spud Date: 6/1/2009
Project: UTAH-UINTAH	Site: NBU 1022-32C PAD	Rig Name No: ENSIGN 139/139, PROPETRO/
Event: DRILLING	Start Date: 5/29/2009	End Date: 8/24/2009
Active Datum: RKB @5,463.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/32/0/NENW/6/PM/N/205.00/W/0/2,058.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	PU	MD From (ft)	Operation
	13:00 - 16:30	3.50	DRLPRO	12	E	P		HELD SAFETY MEETING W/ HALLIBURTON & R/U CEMENT HEAD & CEMENT W/ 40 BBLS WATER AHEAD & LEAD 420 SKS @ 11.8 PPG YIELD 2.38 & TAIL 1300 SKS @ 14.3 PPG YIELD 1.22 & DROP PLUG & DISPLACED W/ 135.4 BBLS WATER & BUMP PLUG W/ 500 OVER FINAL CIRC PSI 2444 - PLUG HELD & HAD FULL RETURNS DURING CEMENT JOB & 27 BBLS WATER TO PIT. & R/U DOWN
	16:30 - 17:30	1.00	DRLPRO	12	C	P		WASH OUT B.O.P & LAND HANGER LOST HANGER SEAL CAMERON WILL HAVE TO GLASS PACK HANGER FOR SEAL. SET 100K ON HANGER & BACK OFF L/D JT & L/DN
	17:30 - 21:00	3.50	DRLPRO	14	A	P		NIPPLE DOWN B.O.P'S & HAUL 400 BBLS MUD TO UPRIGHT TANK & CLEAN MUD TANKS & RELEASED RIG @ 21:00 HRS ON 08/25/2009

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OPERATION SUMMARY REPORT

Well: NBU 1022-32D1S [GREEN]		Spud Conductor: 4/30/2009		Spud Date: 6/1/2009	
Project: UTAH-UINTAH			Site: NBU 1022-32C PAD		Rig Name No:
Event: COMPLETION			Start Date: 12/24/2009		End Date: 1/6/2010
Active Datum: RKB @5,463.00ft (above Mean Sea Level)			UWI: 0/10/S/22/E/32/0/NENW/6/PM/N/205.00/W/0/2,058.00/0/0		

Date	Time Interval	Duration (hr)	Phase	Code	Sub Code	PU	MD From (ft)	Operation
12/28/2009	6:00 - 6:30	0.50	COMP	48		P		HSM, MIRU / PERF
	6:30 - 23:59	17.48	COMP	36	E	P		STG #1] P/U RIH W/ PERF GUN 3-3/8 EXPEND [SCALLOP] 23 GRM, 0.36" HOLE, PERF MESAVERDE. 7914'-7920' 4 SPF, 90* PH, 24 HOLES. 7892'-7896' 4 SPF, 90* PH, 16 HOLES. [40 HOLES] WAIT ON SCHLUMBERGER TO RIG UP & FIX FRAC VAN. [9-1/2 HRS] P/T SURFACE LINES TO 8500#. WHP= 1028#, BRK DN PERF @ 5314 # 6 B/M, INJ RT=53.1 B/M, INJ PSI= 4730#, ISIP= 1748#, FG= 0.65., CALC 73% PERF OPEN, PUMP'D 2209 BBLS SLK WTR & 82440# OTTAWA SD W/ 5000# RESIN COAT IN TAIL, ISIP= 2150#, FG=0.70, AR= 48.4 B/M, AP= 4090#, MR= 53.4 B/M, MP= 6357#, NPI= 402#, (STG #2) RIH W/ HALLIBURTON 8K CBP AND PERF GUNS, SEY CBP @ 7816', PERF THE MESAVERDE @ 7783'- 7786', 7726'- 7728', 7686' - 7688', 7673'- 7674', 7636'- 7638', 4-SPF, USING 3 3/8" SCALLOP GUNS, 23 gm, 0.36" HOLE 90* PHS, 40 HOLES, 12/29/2009 7:00 - 7:15 0.25 COMP 48 P HSM, COLD WEATHER PERF & FRAC

RECEIVED January 11, 2010

Well: NBU 1022-32D1S [GREEN] Spud Conductor: 4/30/2009 Spud Date: 6/1/2009
 Project: UTAH-UINTAH Site: NBU 1022-32C PAD Rig Name No:
 Event: COMPLETION Start Date: 12/24/2009 End Date: 1/6/2010
 Active Datum: RKB @5,463.00ft (above Mean Sea Level) UWI: 0/10/S/22/E/32/0/NENW/6/PM/N/205.00/W/0/2,058.00/0/0

Date	Time	Duration	Phase	Days	Sub	SPD	R/D Form	Operation
	7:15 - 22:00	14.75	COMP	36	E	P		<p>FRAC STG #2 MESAVERDE 7636'-7786' 40 HOLES.</p> <p>STG #2] WHP=1579#, BRK DN PERFS @=3233#, INJ PSI=4589#, INJT RT=50.7, ISIP=2404#, FG=.74, PUMP'D 2288 BBLS SLK WTR W/ 85358# 30/50 M,ESH W/ 5000# RESIN COAT IN TAIL, ISIP=2250#, FG=.72, AR=47.7, AP=3849#, MR=50.8, MP=4812#, NPI=-154# 40/40 CALC PERFS OPEN 100%.</p> <p>STG #3] P/U RIH W/ BKR 8K CBP & PERF GUN. SET CBP @ 7590', PERF MESAVERDE USING 3-3/8 EXPEND, [SCALLOP] 23 GRM, 0.36" HOLE. 7557'-7560' 4 SPF, 90* PH, 12 HOLES. 7522'-7524' 4 SPF, 90* PH, 8 HOLES. 7412'-7414' 4 SPF, 90* PH, 8 HOLES. 7358'-7360' 4 SPF, 90* PH, 8 HOLES. [36 HOLES]</p> <p>WHP= 1871#, BRK DN PERFS @ 3940# @ 6 B/M,, INJ PSI= 4550#, INJT RT = 50.7 B/M, ISIP= 1959#, FG=0.69, PUMP'D 1462 BBLS SLK WTR W/ 61218# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP= 2450#, FG=0.76, AR= 47.5 B/M, AP= 4060#, MR= 50.9 B/M, MP= 5150#, NPI= 392#, 32 / 36 CALC PERFS OPEN 88 %.</p> <p>STG #4] P/U RIH W/ BKR 8K CBP & PERF GUN. SET CBP @7233', PERF MESAVERDE USING 3-3/8 EXPEND, [SCALLOP] 23 GRM, 0.36" HOLE. 7199'-7203' 4 SPF, 90* PH, 16 HOLES. 7176'-7178' 4 SPF, 90* PH, 8 HOLES. 7058'-7061' 4 SPF, 90* PH, 12 HOLES. 6977'-6978' 4 SPF, 90* PH, 4 HOLES. [40 HOLES]</p> <p>WHP= 1670#, BRK DN PERFS @ 2392# @ 6 B/M, INJ PSI= 4890#, INJT RT 50.7 B/M, ISIP= 1652#, FG= 0.66, PUMP'D 1513 BBLS SLK WTR W/ 64657# 30/50 M,ESH W/ 5000# RESIN COAT IN TAIL, ISIP= 2796#, FG=0.82, AR= 47.3 B/M, AP= 4237#, MR= 50.8 B/M, MP= 5273#, NPI= 1144#, 26/40 CALC PERFS OPEN 65 %.</p> <p>(KILL PLUG) RIH W/ BAKER 8K CBP, SET CBP @ 6927', R/D WIRELINE AND FRAC, DAY 3 - JSA & SM. NO H2S PRESENT.</p>
12/30/2009	7:00 - 7:15	0.25	COMP	48		P		

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Operation Summary Report

Well: NBU 1022-32D1S [GREEN]		Spud Conductor: 4/30/2009		Spud Date: 6/1/2009	
Project: UTAH-UINTAH			Site: NBU 1022-32C PAD		Rig Name No:
Event: COMPLETION			Start Date: 12/24/2009		End Date: 1/6/2010
Active Datum: RKB @5,463.00ft (above Mean Sea Level)			UWI: 0/10/S/22/E/32/0/NENW/6/PM/N/205.00/W/0/2,058.00/0/0		

Date	Time	Duration (hr)	Phase	Code	Sub Code	MD From (ft)	Operation
	7:15 - 18:00	10.75	COMP	31	I	P	<p>WHP = 0 PSI, MIRU RIG, SPOT EQUIP, ND FRAC VALVES, NU BOP. RU FLOOR & TBG EQUIP. PREP & TALLY TBG. PU 3 7/8" BIT, POBS & XN NIPPLE. RIH ON NEW 2 3/8" 4.7# L80 TBG. TAG FILL @ 6915'. RU PWR SWVL & PMP. EST CIRC. PT BOP TO 3000 PSI. C/O 12' OF SND.</p> <p>CBP 1) DRLG OUT BAKER 8K CBP @ 6927' IN 12 MIN. 200 PSI DIFF. RIH TAG FILL @ 7198'. C/O 35' OF SND. FCP = 25 PSI.</p> <p>CBP 2) DRLG OUT BAKER 8K CBP @ 7233' IN 14 MIN. 500 PSI DIFF. RIH TAG FILL @ 7566'. C/O 24' OF SND. FCP = 100 PSI.</p> <p>CBP 3) DRLG OUT BAKER 8K CBP @ 7590' IN 10 MIN. 400 PSI DIFF. RIH TAG FILL @ 7784'. C/O 30' OF SND. FCP = 150 PSI.</p> <p>CBP 4) DRLG OUT BAKER 8K CBP @ 7816' IN 14 MIN. 300 PSI DIFF. RIH TAG FILL @ 8616'. PBTD @ 8739'. (124' OF FLILL- 695' RH) FCP = 200 PSI. RD PWR SWVL, RU TBG EQUIP. POOH & LD 32 JTS TBG ON FLOAT. (66 JTS TOTAL ON FLOAT). AVG 12 MIN/PLG, C/O 101' SND. LND TBG ON HANGER W/239 JTS NEW 2 3/8" 4.7# L80 TBG. EOT @ 7599.65'. XN NIPPLE @ 7597.45'.</p> <p>RD FLOOR & TBG EQUIP. ND BOP, DROP BALL, NUWH. PMP OF BIT @ 700 PSI. WAIT 30 MIN FOR BIT TO FALL TO BTM. TURN WELL TO F.B.T. ON 20 CHOKE. FTP = 000 PSI, SICP = 1250 PSI. TURN WELL TO F.B. C.</p> <p>18:00 - SDFN - PREP TO MOVE RIG TO NBU 1022-32B3S IN AM.</p>
1/7/2010	7:00 -			33	A		<p>7 AM FLBK REPORT: CP 1800#, TP 950#, 20/64" CK, 57 BWPH, LIGHT SAND, LIGHT GAS TTL BBLs RECOVERED: 1994 BBLs LEFT TO RECOVER: 5648</p>
1/8/2010	7:00 -			33	A		<p>7 AM FLBK REPORT: CP 2350#, TP 1125#, 20/64" CK, 48 BWPH, LIGHT SAND, LIGHT GAS TTL BBLs RECOVERED: 3220 BBLs LEFT TO RECOVER: 4422</p>
1/9/2010	13:00 -		PROD	50			<p>WELL TURNED TO SALE @ 1300 HR ON 1/9/10 - FTP 1125#, CP 2350#, 950 MCFD, 48 BWPD, 20/64 CK</p>
	7:00 -			33	A		<p>7 AM FLBK REPORT: CP 2050#, TP 1075#, 20/64" CK, 38 BWPH, LIGHT SAND, 1086 GAS TTL BBLs RECOVERED: 4264 BBLs LEFT TO RECOVER: 3378</p>
1/10/2010	7:00 -			33	A		<p>7 AM FLBK REPORT: CP 1850#, TP 975#, 20/64" CK, 32 BWPH, TRACE SAND, - GAS TTL BBLs RECOVERED: 5102 BBLs LEFT TO RECOVER: 2540</p>
1/11/2010	7:00 -			33	A		<p>7 AM FLBK REPORT: CP 1675#, TP 900#, 20/64" CK, 24 BWPH, TRACE SAND, - GAS TTL BBLs RECOVERED: 5778 BBLs LEFT TO RECOVER: 1864</p>

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STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22798
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 1022-32D1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047402040000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0205 FNL 2058 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 32 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 checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 9/21/2011 <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 checked="" 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.		
<p>The operator requests approval to conduct wellhead/casing repair operations on the subject well location. Please find the attached procedure for the proposed repair work on the subject well location.</p> <div style="text-align: right; margin-top: 20px;"> <p>Approved by the Utah Division of Oil, Gas and Mining</p> <p>Date: <u>09/26/2011</u></p> <p>By: <u><i>Dark K. Quist</i></u></p> </div>		
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 9/21/2011	

WORKORDER #:

Name: NBU 1022-32D1S - NBU 1022-32C PAD
Surface Location: NENW Sec. 32, T10S, R22E
 Uintah County, UT

5/16/2011

API: 4304740204 **LEASE#:** ST ML 22798

ELEVATIONS: 5449' GL 5462' KB

TOTAL DEPTH: 8800' **PBTD:** 8740'

SURFACE CASING: 9 5/8", 36# J-55 @ 1848'

PRODUCTION CASING: 4 1/2", 11.6#, I-80 @ 8783'
 TOC @ Surface per CBL

PERFORATIONS: Mesaverde 6977' - 7920'

Tubular/Borehole	Drift inches	Collapse psi	Burst psi	Capacities		
				Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" 4.7# J-55 tbg.	1.901	8100	7700	0.1624	0.02171	0.00387
4.5" 11.6# I-80	3.875	6350	7780	0.6528	0.0872	0.0155
9.625" 36# J-55	8.921	2020	3520	3.247	0.434	0.0773
Annular Capacities						
2.375" tbg. X 4 1/2" 11.6# csg				0.4227	0.0565	0.01

GEOLOGICAL TOPS:

960' Green River
 1717' Mahogany
 4178' Wasatch
 6623' Mesaverde

NBU 1022-32D1S- WELLHEAD REPAIR PROCEDURE

PREP-WORK PRIOR TO MIRU:

1. Dig out down to the 2" surface casing valve or to the valve on the riser off the surface casing.
2. Install a tee with 2 valves, with a pressure gauge and sensor on one valve.
3. Open casing valve and record pressures.
4. Install nipple and steel hose on the other valve, the relief valve,. Do not use hammer unions. No impact equipment or tools to be used for any of this installation. Extend hose and hard piping to a downwind location at least 100' from the wellhead. Consider installing a manifold so that vent area could be in two locations approx. 90 degrees apart from the wellhead.
5. Open the relief valve and blow well down to the atmosphere.
6. Make a determination of amount of gas flow, either by installation of a choke nipple, bucket test or other.
7. Shut well in. Observe for rate of build-up by utilizing sensor data. Do not build-up for more than 24 hours. Vent gas through the vent line and leave open to the atmosphere.

WORKOVER PROCEDURE:

1. MIRU workover rig.
2. Kill well with 10# brine / KCL (dictated by well pressure).
3. Remove tree, install double BOP with blind and 2 3/8" pipe rams, with accumulator closing unit and manual back-ups. Function test BOP system.
4. POOH w/ tubing laying down extra tubing.
5. Rig up wireline service. RIH and set CBP @ ~6927'. Dump bail 4 sx cement on top of plug. POOH and RD wireline service. TIH w/ tubing and seating nipple. Land tubing ±60' above cement. RDMO.
6. Monitor well pressures. If surface casing is dead. MIRU. ND WH and NU BOP. POOH w/ tubing.
7. Depending on conditions at wellsite, continue with either CUT/PATCH Procedure or BACK-OFF Procedure.

CUT/PATCH PROCEDURE:

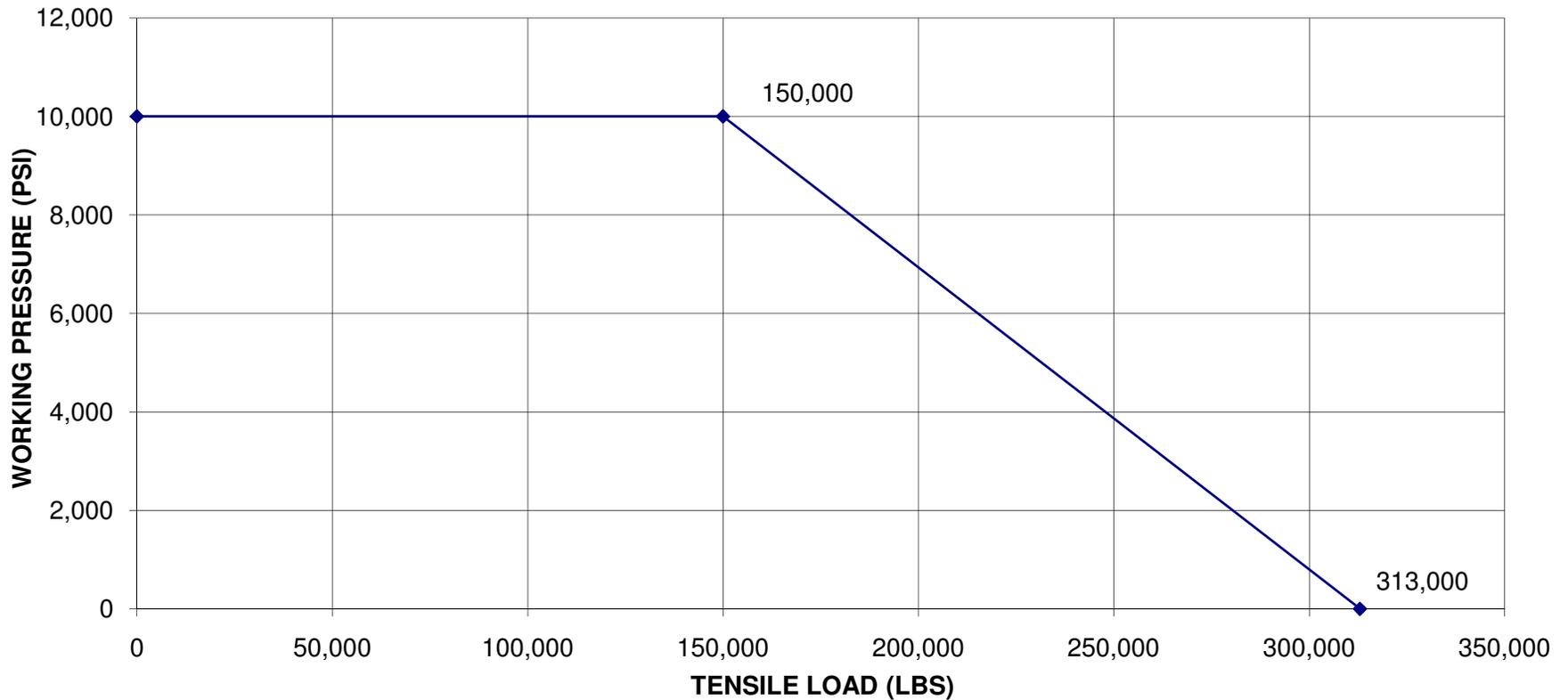
1. PU internal casing cutters and RIH. Cut casing at +/- 30' from surface.
2. POOH, LD cutters and casing.
3. PU 7 3/8" overshot with 4 1/2" right hand standard wicker grapple, 1 - 4 3/4" drill collar with 3 1/2" IF threads, pup joint, manual bumper sub, and crossovers. If casing cut is deeper than ±30' utilize >7000 ft-lb torque pipe as needed. Pull a minimum of 10,000# to keep grapple engaged if cement top is high (<~900'). If cement top is low (>~900'), more weight will be required to put casing in neutral. Torque casing string to ±7000 ft-lbs, count number of turns to make-up, and document in the daily report. Ensure that tongs are safely anchored to rig and that all personnel are at a safe working distance from the tongs during torque-up and torque release. After initial make-up, place pipe torque to neutral and mark pipe. Place ±7000 ft-lbs on casing a second time, count turns, then return pipe torque to neutral and count turns. Repeat if torque-up turns do not equal torque release turns. Once torque-in equals torque-out, release overshot, POOH, and lay down.
4. TIH w/ skirted mill and dress off the fish top for approximately 1/2 hour. TOO H.
5. PU & RIH w/ 4 1/2" 10k external casing patch on 4 1/2" P-110 casing. Ensure that sliding sleeve assembly shifts ±3' and casing tags no-go portion of patch. NOTE: Shear pins will shear at 3500 to 4500 lbs.
6. Latch fish, PU to 100,000# tension. RU B&C. Cycle pressure test to 3500 psi.
7. Install slips. Land casing w/ 80,000# tension.
8. Cut-off and dress 4 1/2" casing stub.
9. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~6877'. Clean out to PBSD (8740').
10. POOH, land tbg and pump off POBS.
11. NUWH, RDMO. Turn well over to production ops.

BACK-OFF PROCEDURE:

1. PU internal casing cutters and RIH. Cut casing at +/- 6' from surface.
2. POOH, LD cutters and casing.
3. PU 4 1/2" overshot. RIH, latch fish. Pick string weight to neutral.
4. MIRU casing crew and wireline services. RIH and shoot string shot at casing collar @ ± 46'.
5. Back-off casing, POOH.

6. PU new casing joint with buttress threads and entry guide and RIH. Tag casing top. Thread into casing and torque up to ± 7000 ft-lbs, count number of additional turns to make-up, and document in the daily report. Ensure that tongs are safely anchored to rig and that all personnel are at a safe working distance from the tongs during torque-up and torque release. After initial make-up, place pipe torque to neutral and mark pipe. Place ± 7000 ft-lbs on casing a second time, count turns, then return pipe torque to neutral and count turns. Repeat if torque-up turns do not equal torque release turns. Once torque-in equals torque-out go to step 7.
7. PU 100,000# tension string weight. RU B&C. Cycle pressure test to 3500 psi.
8. Install slips. Land casing w/ 80,000# tension.
9. Cut-off and dress 4 1/2" casing stub.
10. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~6877'. Clean out to PBTD (8740').
11. POOH, land tbg and pump off POBS.
12. NUWH, RDMO. Turn well over to production ops.

**STRENGTH DATA FOR LOGAN 5.88" OD "L" TYPE CSG PATCH
4-1/2 CASING, 10K PSI MAX WP 125K YIELD MAT'L
LOGAN ASSEMBLY NO. 510L-005 -000**



COLLAPSE PRESSURE:
11,222 PSI @ 0 TENSILE
8,634 PSI @ 220K TENSILE

Tensile Strength @ Yield:
Tensile Strength w/ 0 Int. Press.= 472,791lbs.
Tensile Strength w/ 10K Int. Press.= 313,748lbs.

DATA BY SLS 11/16/2009

RECEIVED Sep. 21, 2011

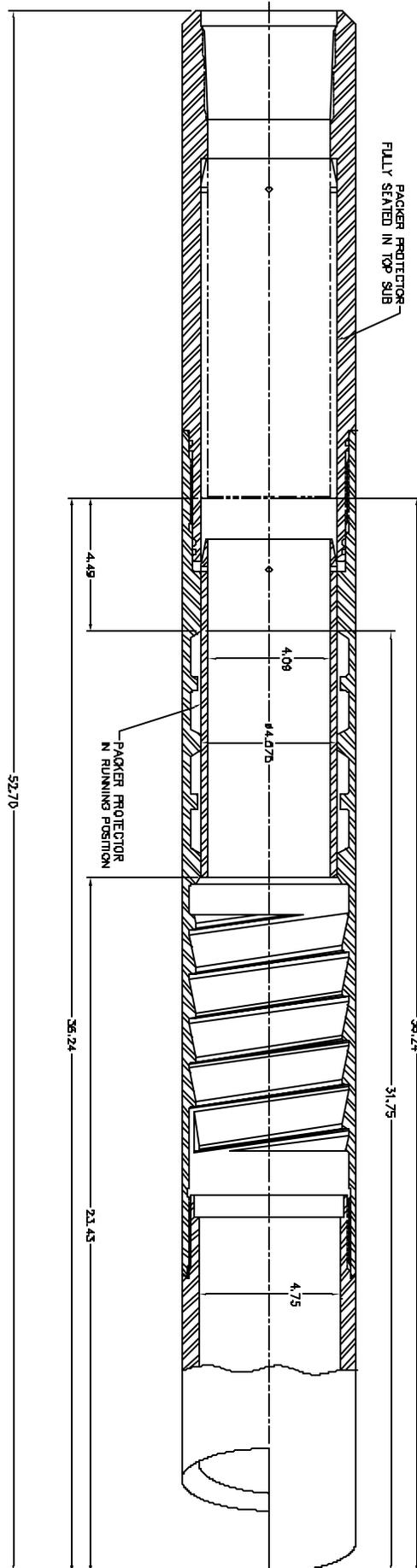


Logan High Pressure Casing Patches Assembly Procedure

All parts should be thoroughly greased before being assembled.

1. Install all four Logan Type "L" Packers in the spaces provided in the Casing Patch Bowl. Refer to diagram provided for proper installation.
2. Install Packer Protector from the Basket Grapple end of the Bowl. The beveled end of the Packer Protector goes in first. Carefully push the Packer Protector through the four Type "L" Packers.
3. Align Shear Pin Holes in Packer Protector so that the holes have just passed into the counter bore at the Top Sub end, refer to diagram. The Packer Protector is provided with four Shear Pin Holes. Use only two holes, 180 degrees apart and install the pins.
4. Screw the Basket Grapple in from the lower end of the Bowl, using left-hand rotation. The Tang Slot in the Basket Grapple must land in line with the slot in the Bowl.
5. Insert the Basket Grapple Control into the end of the Bowl. Align Tang on the Basket Grapple Control with the Tang Slot of the Bowl and Basket Grapple. This secures the Bowl and the Basket Grapple together.
6. Install the Cutlipped Guide into the lower end of the Bowl.
7. Install O-Rings on the two five-foot long Extensions. Screw the first Extension into the top end of the Bowl. Screw the second Extension into the top end of the first Extension.
8. Install O-Ring on Top Sub. Screw Top Sub into top end of second Extension.

Follow recommended Make-Up Torque as provided in chart.



510L-005-001 4-1/2" LOGAN HP CASING PATCH

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22798
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 1022-32D1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047402040000
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: 0205 FNL 2058 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 32 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 checked="" type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/7/2011	<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 style="width:100px;" type="text"/>

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

The operator has concluded the wellhead/casing repairs on the subject well location. Please see the attached chronological history for the details of the operations.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 January 27, 2012

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 1/24/2012	

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-32D1S [GREEN]		Spud Conductor: 4/30/2009		Spud Date: 6/1/2009				
Project: UTAH-UINTAH		Site: NBU 1022-32C PAD		Rig Name No: SWABBCO 6/6				
Event: WELL WORK EXPENSE		Start Date: 10/5/2011		End Date: 10/7/2011				
Active Datum: RKB @5,463.01ft (above Mean Sea Level)			UWI: 0/10/S/22/E/32/0/NENW/6/PM/N/205.00/W/0/2,058.00/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/5/2011	10:00 - 10:15	0.25	WO/REP	48		P		JSA= WELL CONTROL
	10:15 - 17:00	6.75	WO/REP	30		P		MOVE IN SPOT EQUIP RU RIG & PUMP, FWP = 100 PSI PUMP 20 BBLS TMAC DWN TUB TO CONTROL WELL ND WELLHEAD NU BOPS CONT CSG W/ 20 BBLS TMAC UNLAND TUBING LD HNGR POOH W/ PROD TUBING 239 JNTS LD HNGR RU W/L RIH W/ GUAGE RNG TO 7000' POOH PU 10K CIBP RIH SET @ 6900' DUMP BAIL 2 SKS CEM ON CIBP FILL HOLE W/ TMAC PRESS TEST TO 500 PSI SIW PREP TO REPAIR W/H IN AM SDFN
10/6/2011	7:00 - 7:15	0.25	WO/REP	48		P		JSA= SWIVEL SAFETY
	7:15 - 17:00	9.75	WO/REP	30		P		SIWP= 0 PSI PU INT CUTTER CUT CSG BELOW HNGR RD SWVL RD WELLHEAD PU OVERSHOT RIH OVER CSG RU W/L & CSG TONGS APPLY LH TORQUE SET OFF STRING SHOT B/O CSG 1 JNT BELOW PUP POOH PU NEW JNT & PUP RIH THREAD ONTO CSG STRING TORQUE TO 7000# PULL 9000# RU TESTER & TEST TO 3500# SET SLIPS NU WELLHEAD & BOPS RU FLOOR & TUBING EQUIP PU BIT RIH TAG TOC @ 6880' RU PWR SWIVEL PREP TO D/O SIW SDFN
10/7/2011	7:00 - 7:15	0.25	WO/REP	48		P		JSA= FOAMING
	7:15 - 17:00	9.75	WO/REP	30		P		SIWP= 0 PSI EST CIRC W/ FOAMER C/O & DRILL THRU CEM & CIBP @ 6900' CIRC CLEAN CONTINUE TO RIH TAG SOLID @ 8180' EST CIRC COULDNT MAKE HOLE CIRC CLEAN POOH LD 18 JNTS LAND TUBING ON HNGR W/ 239 JNTS EOT @ 7599.82' RU RIH W/ BROACH TO XN NPL PUMP OFF BIT @ 1100# RD FLOOR & TUBING EQUIP ND BOPS NU WELLHEAD RD RIG MOVE TO STATE 1021-32H RU RIG