

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.
UTU-8345

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

1a. Type of Work: DRILL REENTER

b. Type of Well: Oil Well Gas Well Other Single Zone Multiple Zone

8. Lease Name and Well No.
LOVE 1121-8L

9. API Well No.
43047-38748

2. Name of Operator
KERR MCGEE OIL & GAS ONSHORE LP

3A. Address
1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. (include area code)
(435) 781-7024

10. Field and Pool, or Exploratory
UNDESIGNATED Love

11. Sec., T., R., M., or Blk, and Survey or Area
SEC. 8, T11S, R21E

4. Location of Well (Report location clearly and in accordance with any State requirements.)*
At surface **NWSW 1781'FSL, 837'FWL 619987X 39.872629**
At proposed prod. Zone **4414353Y -109.596996**

12. County or Parish
UINTAH

13. State
UTAH

14. Distance in miles and direction from nearest town or post office*
17.55 MILES SOUTH OF OURAY, UTAH

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
837'

16. No. of Acres in lease
2486.60

17. Spacing Unit dedicated to this well
40.00

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
REFER TO TOPO C

19. Proposed Depth
9100'

20. BLM/BIA Bond No. on file
BOND NO: WY-2357

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
5575' UNGRADED GL

22. Approximate date work will start*

23. Estimated duration

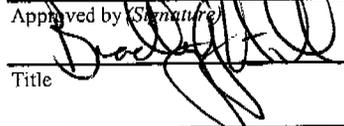
24. Attachments

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

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office. | <ul style="list-style-type: none"> 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be required by the authorized office. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

25. Signature:  Name (Printed/Typed): **SHEILA UPCHEGO** Date: **10/11/2006**

Title: **REGULATORY ANALYST**

Approved by:  Name (Printed/Typed): **BRADLEY G. HILL** Date: **10-24-06**

Title: **ENVIRONMENTAL MANAGER**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

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

*(Instructions on reverse)

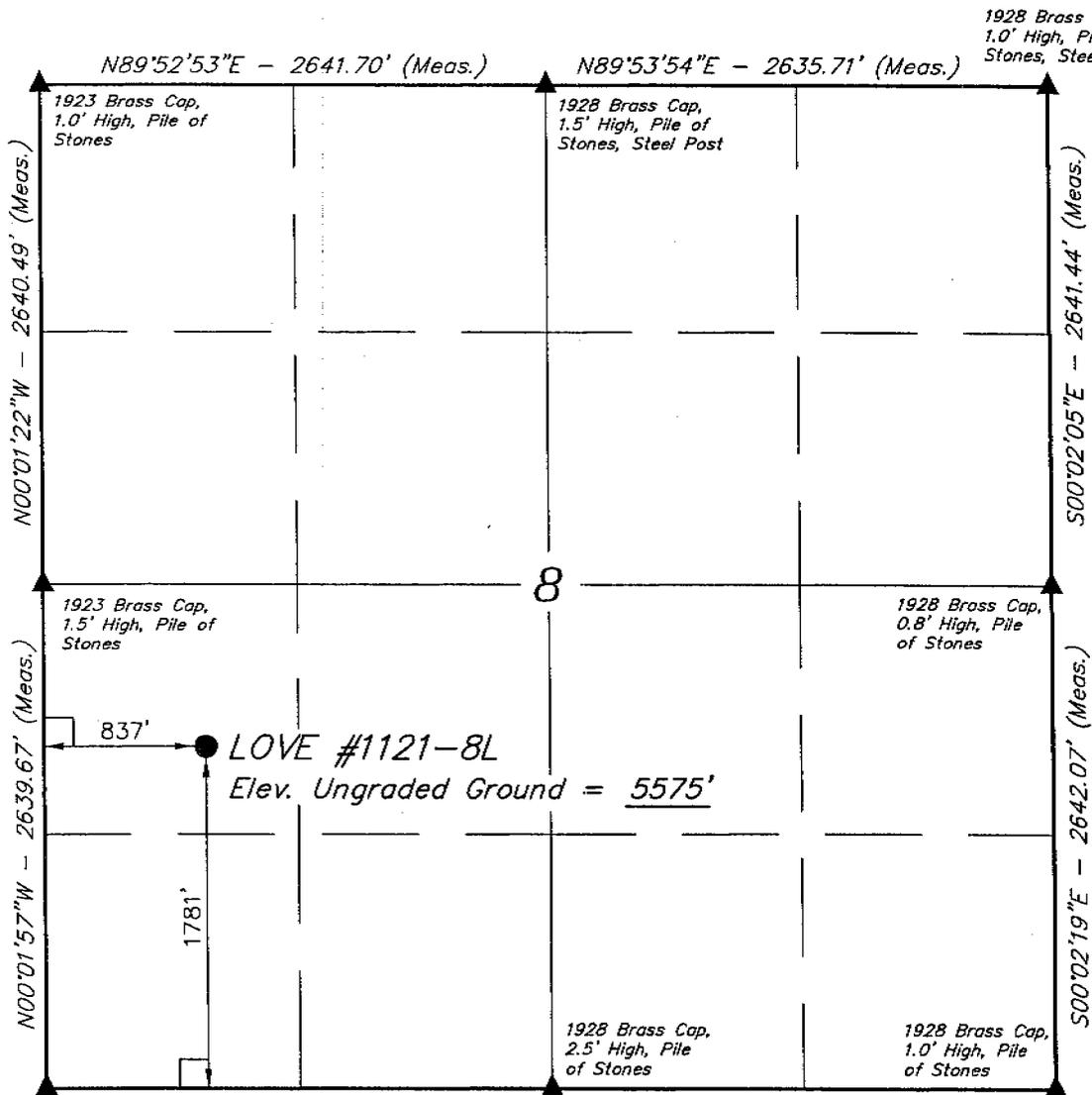
RECEIVED
OCT 20 2006

Federal Approval of this
Action is Necessary

DIV. OF OIL, GAS & MINING

T11S, R21E, S.L.B.&M.

Well location, LOVE #1121-8L, located as shown in the NW 1/4 SW 1/4 of Section 8, T11S, R21E, S.L.B.&M. Uintah County, Utah.

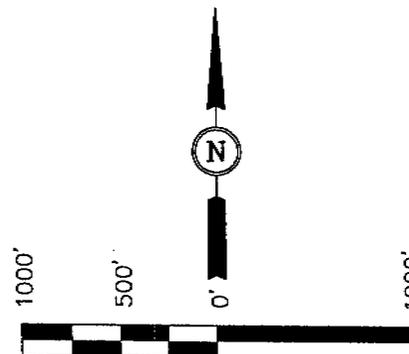


BASIS OF BEARINGS

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

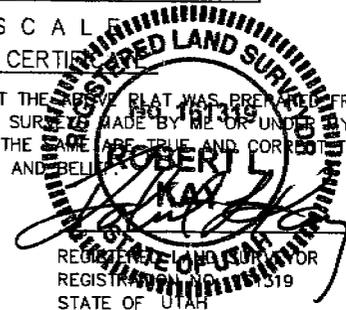
BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHEAST CORNER OF SECTION 2, T11S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE, QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5584 FEET.



SCALE
CERTIFIED

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



Revised 9-21-06 T.D.

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

SCALE 1" = 1000'	DATE SURVEYED: 12-16-04	DATE DRAWN: 12-29-04
PARTY D.K. C.M. E.C.O.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE KERR MCGEE OIL AND GAS ONSHORE LP	

1923 Brass Cap, 1.0' High, Pile of Stones

LEGEND:

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

(AUTONOMOUS NAD 83)
LATITUDE = 39°52'21.54" (39.872650)
LONGITUDE = 109°35'51.57" (109.597658)
(AUTONOMOUS NAD 27)
LATITUDE = 39°52'21.66" (39.872683)
LONGITUDE = 109°35'49.09" (109.596969)

LOVE 1121-8L
NW/SW SEC. 8, T11S,R21E
UINTAH COUNTY, UTAH
UTU-8345

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. **Estimated Tops of Important Geologic Markers:**

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	903'
Top of Birds Nest Water	1128'
Mahogany	1636'
Wasatch	4076'
Mesaverde	6907'
MVU2	7999'
MVL1	8506'
TD	9100'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Water	Green River	903'
	Top of Birds Nest Water	1128'
	Mahogany	1636'
Gas	Wasatch	4076'
	Mesaverde	6907'
	MVU2	7999'
Gas	MVL1	8506'
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 9100' TD, approximately equals 5642 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3640 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. **Variations:**

Please refer to the attached Drilling Program.

10. **Other Information:**

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE October 11, 2006
 WELL NAME LOVE 1121-8L TD 9,100' MD/TVD _____
 FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 5,575' GL KB 5,590'
 SURFACE LOCATION NWSW SEC. 8, T11S, R21E 1781'FSL, 837'FWL BHL Straight Hole
 Latitude: 39.872650 Longitude: 109.597658
 OBJECTIVE ZONE(S) Wasatch/Mesaverde
 ADDITIONAL INFO Regulatory Agencies: BLM (SURF & MINERALS), UDOGM, Tri-County Health Dept.

GEOLOGICAL FORMATION		MECHANICAL			
LOGS	TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12-1/4"	9-5/8", 32.3#, H-40, STC	Air mist
Catch water sample, if possible, from 0 to 4,076' <div style="margin-left: 40px;"> Green River @ 0,903' Top of Birds Nest Water @ 1128' Mahogany @ 1,636' Preset f/ GL @ 1,800' MD </div>					
Note: 12.25" surface hole will usually be drilled ±400' below the bottom of lost circulation zone. Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone.					
Mud logging program TBD Open hole logging program f/ TD - surf csg			7-7/8"	4-1/2", 11.6#, I-80 or equivalent LTC casing	Water/Fresh Water Mud 8.3-11.5 ppg
	Wasatch @	4,076'			
	Mverde @	6,907'			
	MVU2 @	7,999'			
	MVL1 @	8,506'			
	TD @	9,100'			Max anticipated Mud required 11.5 ppg



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

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				2270	1370	254000
SURFACE	9-5/8"	0 to 1800	32.30	H-40	STC	0.66	1.63	4.99
PRODUCTION	4-1/2"	0 to 9100	11.60	I-80	LTC	2.26	1.17	2.18

- 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 = 11.5 ppg) .22 psi/ft = gradient for partially evac wellbore
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing * Buoy. Fact. of water)
 MASP 3440 psi

***** Burst SF is low but csg is much stronger than formation at 2000'. EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft

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	Prem cmt + 16% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOC	170	35%	11.00	3.82
	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	3,570'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	390	60%	11.00	3.38
	TAIL	5,530'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	1550	60%	14.30	1.31

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

FLOAT EQUIPMENT & CENTRALIZERS

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

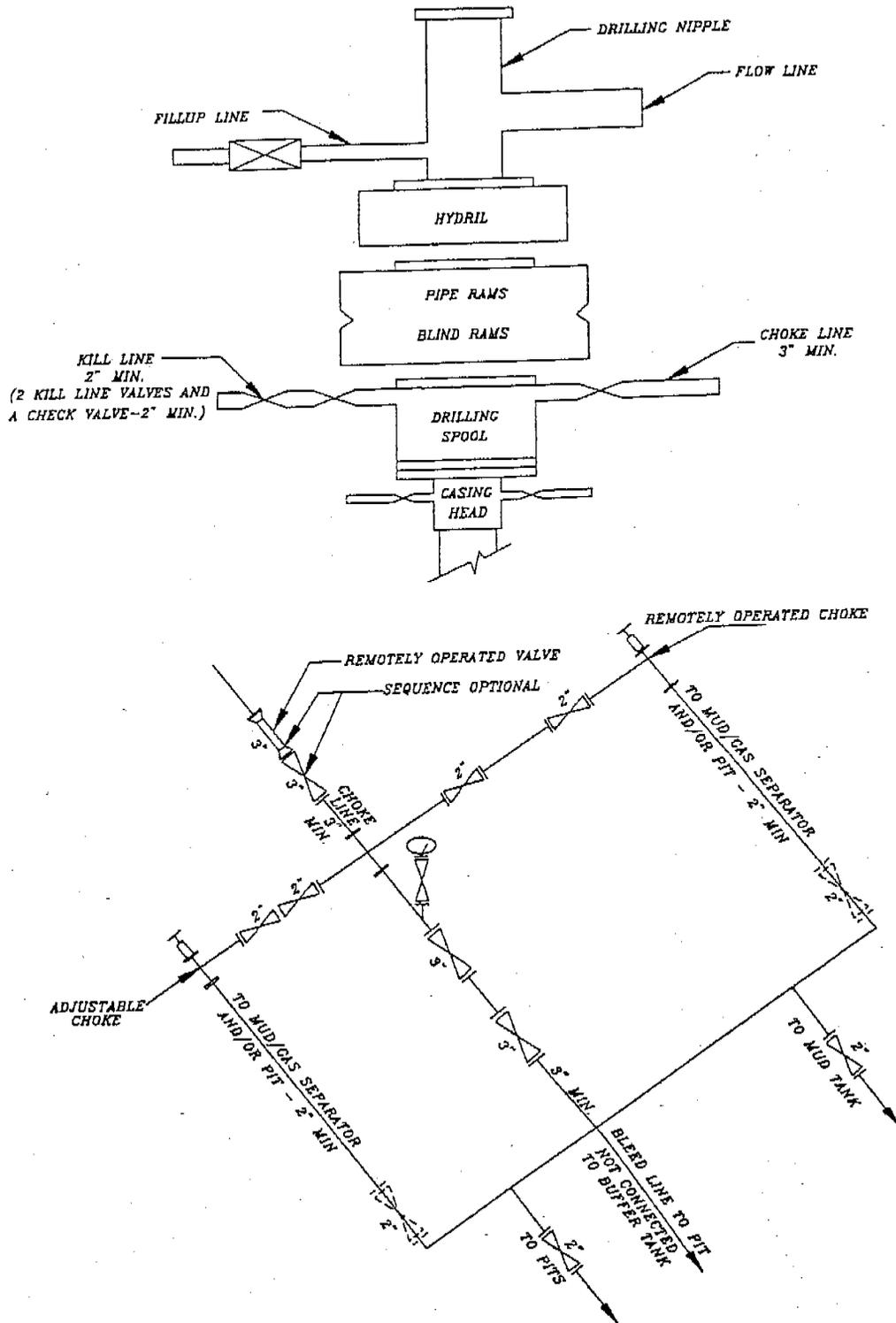
ADDITIONAL INFORMATION

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

DRILLING ENGINEER: _____
 Brad Laney
 DRILLING SUPERINTENDENT: _____
 Randy Bayne

DATE: _____
 DATE: _____

5M BOP STACK and CHOKE MANIFOLD SYSTEM



LOVE 1121-8L
NW/SW SEC. 8, T11S, R21E
UINTAH COUNTY, UTAH
UTU-8345

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. **Existing Roads:**

Directions to the proposed location are attached.

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 0.15 +/- miles of new access roads is proposed. Refer to Topo Map B.

Approximately 0.5 +/- miles of an existing 2-track road needs upgraded. Refer to Topo Map B.

The access road will be crowned (2 to 3%), ditched and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet. Graveling or capping the roadbed will be performed as necessary to provide a well constructed, safe road. Prior to construction or upgrading, the proposed road shall be cleared of any snow and allowed to dry completely.

Surface disturbance and vehicular traffic will be limited to the proposed location and proposed access route. Any additional area needed will be approved in advance. All construction shall be in conformance with the standards outlined in the BLM and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development. 1989.

The road surface and shoulders will be kept in a safe and usable condition and will be maintained in accordance with the original construction standards. All drainage ditches will be kept clear and free-flowing and will be maintained according to original construction standards. The access road surface will be kept free of trash during operations. All traffic will be confined to the approved disturbed surface. Road drainage crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing or shall the drainages be blocked by the road bed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Should mud holes develop, they shall be filled in and detours around them avoided. When snow is removed from the road during the winter months, the snow shall be pushed outside of the borrow ditches, and the turnouts kept clear so that snowmelt will be channeled away from the road.

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

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities & Pipelines:

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 requested color is Carlsbad Canyon (2.5 Y 6/2) as determined during the on-site inspection.

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

Variances to Best Management Practices (BMP) Requests:

Approximately 750' +/- of 4" steel pipeline is proposed from the location to tie-in to an proposed pipeline for the Love 1121-18H pipeline. Please refer to the Topo Map D. The pipeline will be butt-welded together.

The pipeline shall be installed on surface within access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

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 is to be used as discussed during on-site inspection. It will be a minimum of 20 mil thick and felt with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any 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. (Request is in lieu of filing Form 3160-5, after initial production).

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.

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.

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.

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.

When the pit is backfilled, the topsoil pile shall be spread on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The following seed mixture will be used to reclaim the surface for interim reclamation using appropriate reclamation methods. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for drilled seeds are:

Galleta Grass	20 lbs.
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The operator shall call BLM for the seed mixture when final reclamation occurs.

11. Surface Ownership:

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

13. Other Information:

A Class III archaeological survey has been performed and completed on February 4, 2005, the Archaeological Report No. 05-07.

A Paleontological survey has been performed and completed on January 10, 2005, the Paleontological Report No. 05-11. This report are submitted along with the Application for Permit to Drill (APD).

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.

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

Sheila Upchego
Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435) 781-7024

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. Westport Oil & Gas Company agrees to be responsible under the terms and the conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for the lease activities is being provided by BLM Nationwide Bond #WY-2357.

I hereby certify that the proposed drill site and access route has been inspected and 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.


Sheila Upchego

October 11, 2006

Date

KERR McGEE OIL AND GAS ONSHORE L.P.
LOVE #1121-8L
SECTION 8, T11S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 16.9 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE BEGINNING OF THE PROPOSED ACCESS ROAD TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.15 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 48.55 MILES.

KERR McGEE OIL AND GAS ONSHORE L.P.

LOVE #1121-8L
LOCATED IN UINTAH COUNTY, UTAH
SECTION 8, T11S, R21E, S.L.B.&M.

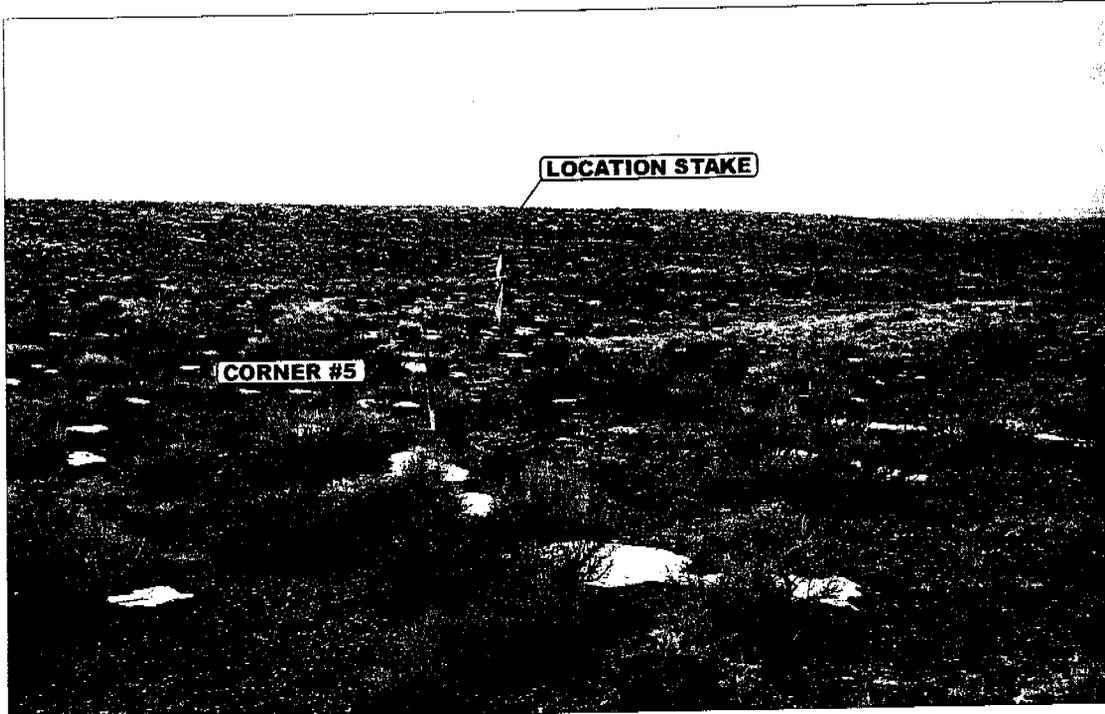


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY

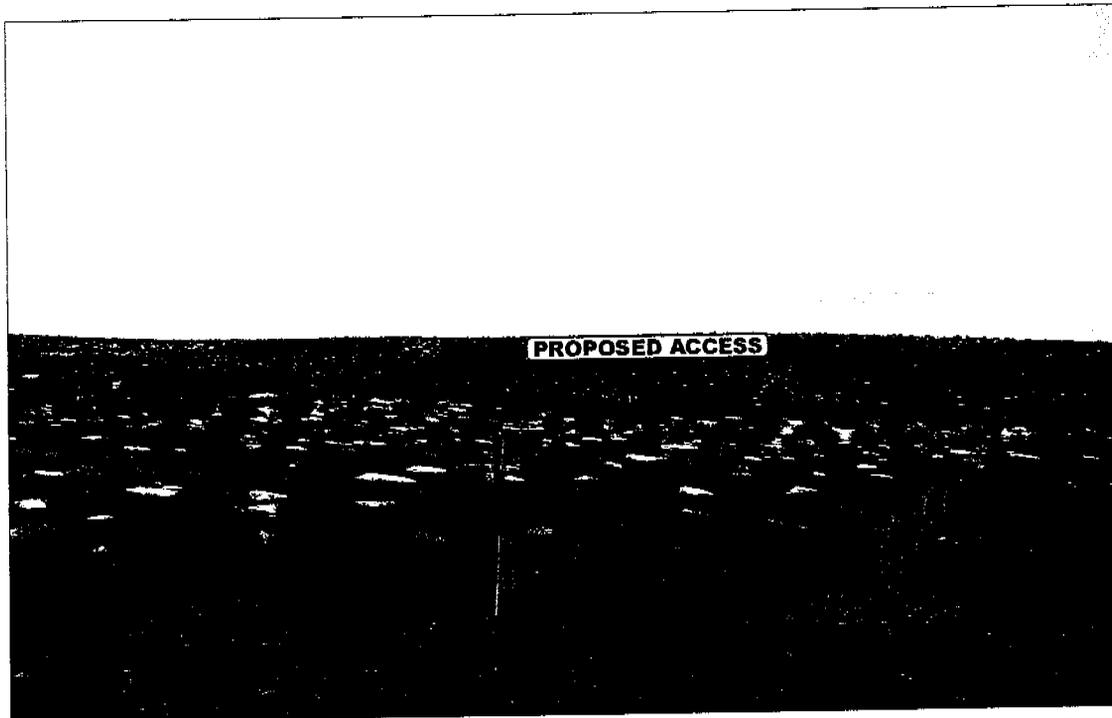


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

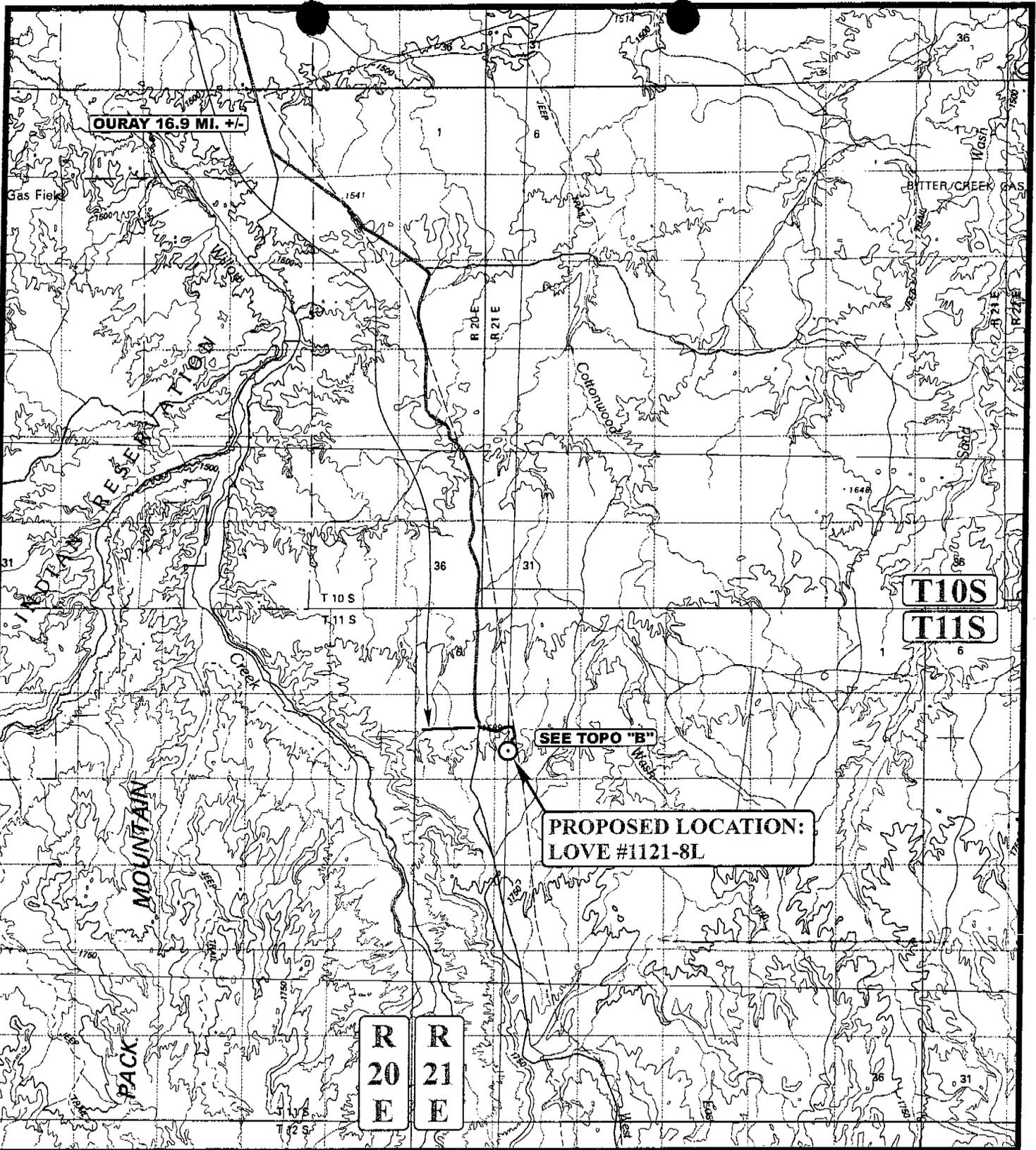
CAMERA ANGLE: SOUTHWESTERLY



- Since 1964 -

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

LOCATION PHOTOS	12	17	04	PHOTO
	MONTH	DAY	YEAR	
TAKEN BY: D.K.	DRAWN BY: P.M.	REV: 09-21-06 T.D.		



LEGEND:

○ PROPOSED LOCATION

KERR McGEE OIL AND GAS ONSHORE L.P.

LOVE #1121-8L
 SECTION 8, T11S, R21E, S.L.B.&M.
 1781' FSL 837' FWL

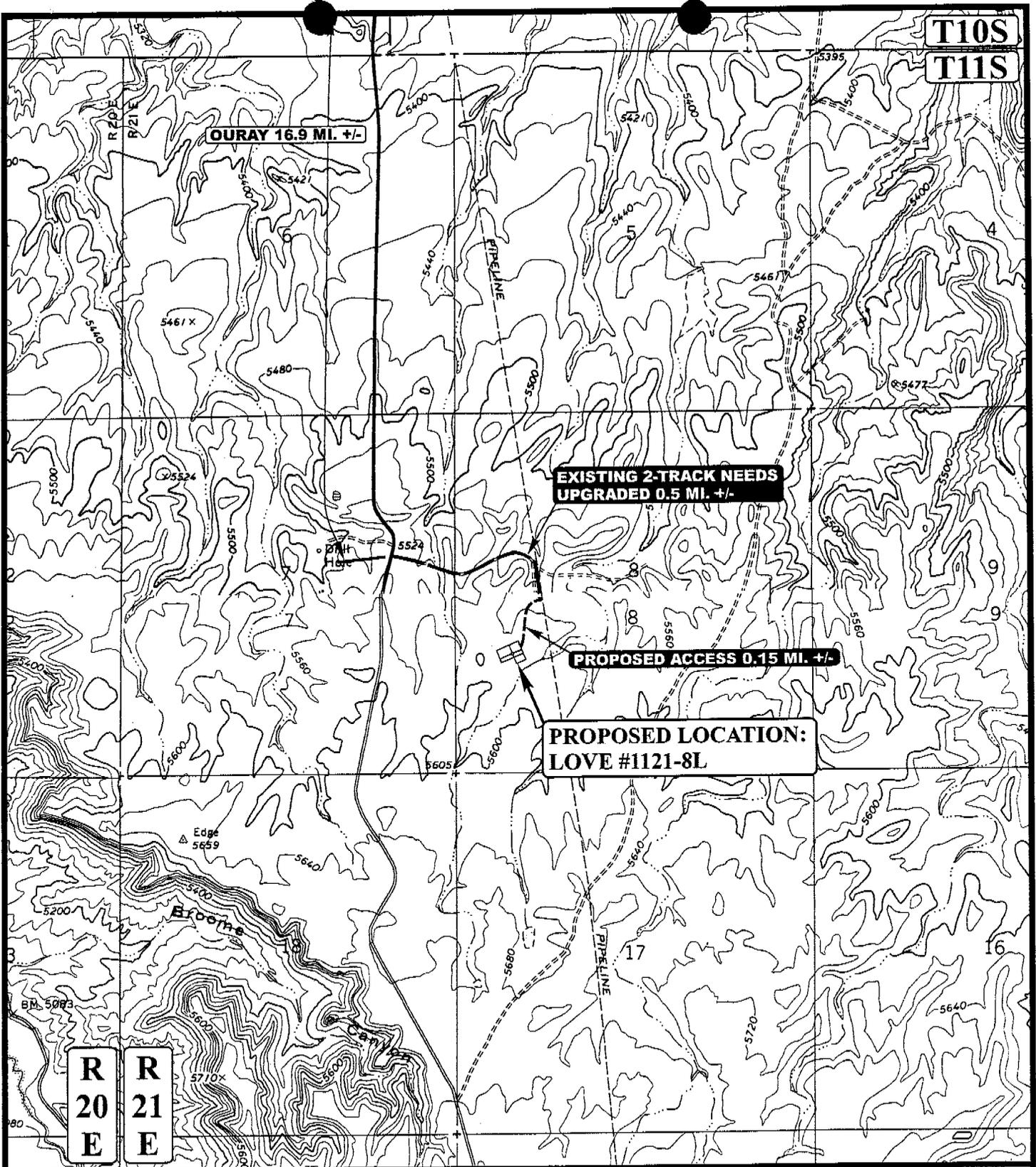


Utah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC 12 17 04
 MAP MONTH DAY YEAR
 SCALE: 1:100,000 DRAWN BY: P.M. REV: 09-21-06 T.D.





LEGEND:

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

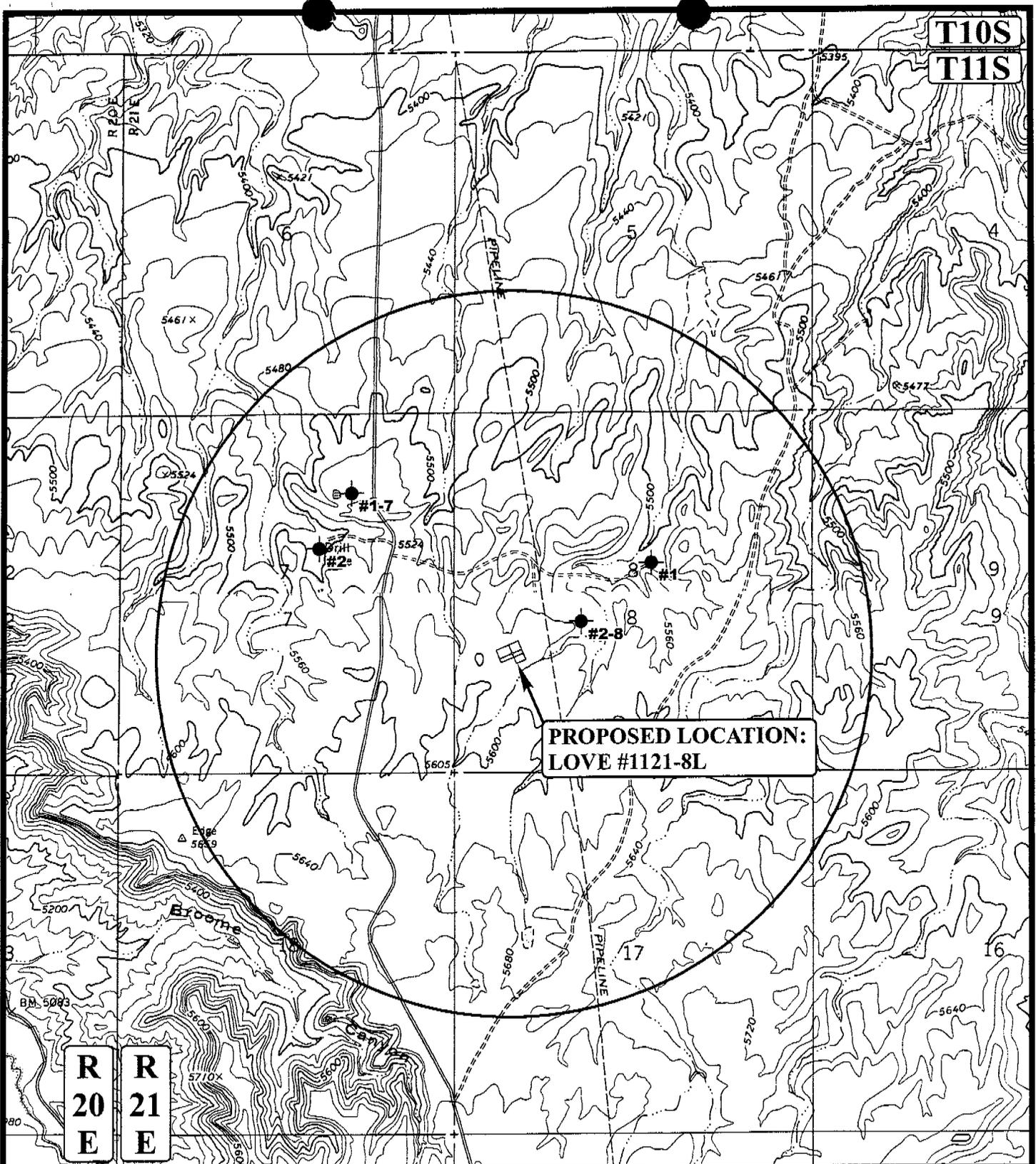


KERR MCGEE OIL AND GAS ONSHORE L.P.

LOVE #1121-8L
SECTION 8, T11S, R21E, S.L.B.&M.
1781' FSL 837' FWL

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

TOPOGRAPHIC MAP	12	17	04	B TOPO
	MONTH	DAY	YEAR	
SCALE: 1" = 2000'		DRAWN BY: P.M.		REV: 09-21-06 T.D.



LEGEND:

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



KERR MCGEE OIL AND GAS ONSHORE L.P.

LOVE #1121-8L
SECTION 8, T11S, R21E, S.L.B.&M.
1781' FSL 837' FWL



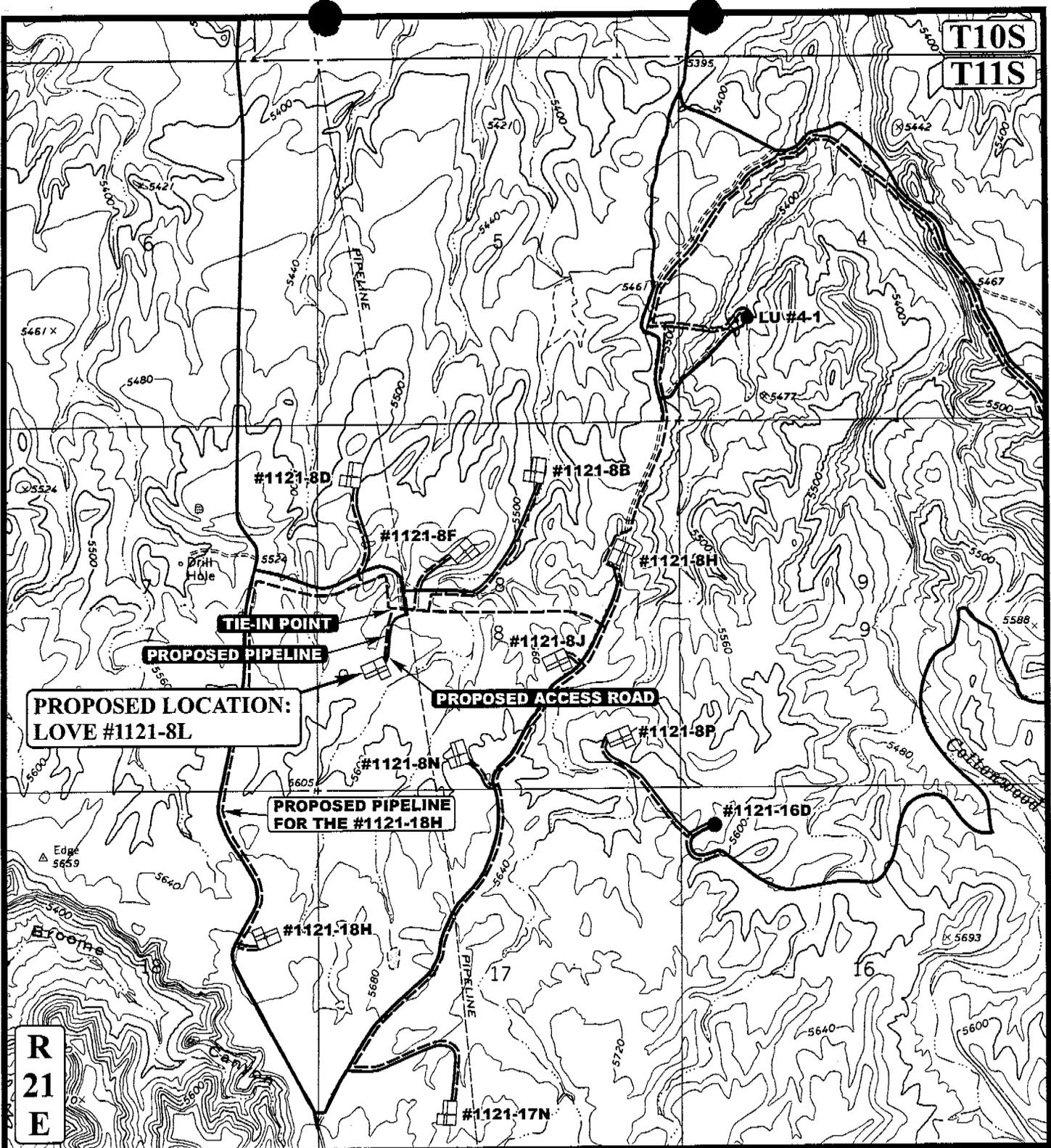
Utah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC
MAP

12	17	04
MONTH	DAY	YEAR

SCALE: 1" = 2000' DRAWN BY: P.M. REV: 09-21-06 T.D.





APPROXIMATE TOTAL PIPELINE DISTANCE = 750' +/-

LEGEND:

-  PROPOSED ACCESS ROAD
-  EXISTING PIPELINE
-  PROPOSED PIPELINE

N



KERR MCGEE OIL AND GAS ONSHORE L.P.

LOVE #1121-8L
SECTION 8, T11S, R21E, S.L.B.&M.
1781' FSL 837' FWL



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

TOPOGRAPHIC MAP
12 | 17 | 04
MONTH | DAY | YEAR
SCALE: 1" = 2000' DRAWN BY: P.M. REV: 09-21-06 T.D.



LOCATION LAYOUT FOR

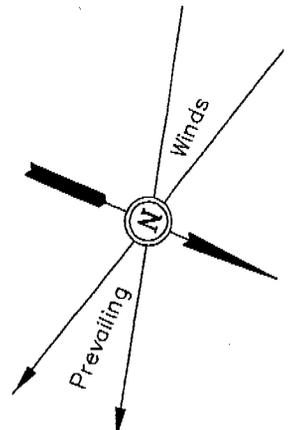
LOVE #1121-8L
SECTION 8, T11S, R21E, S.L.B.&M.

C-8.0' 1781' FSL 837' FWL
El. 81.9'

C-3.1'
El. 77.0'

CONSTRUCT DIVERSION DITCH

F-1.3'
El. 72.6'

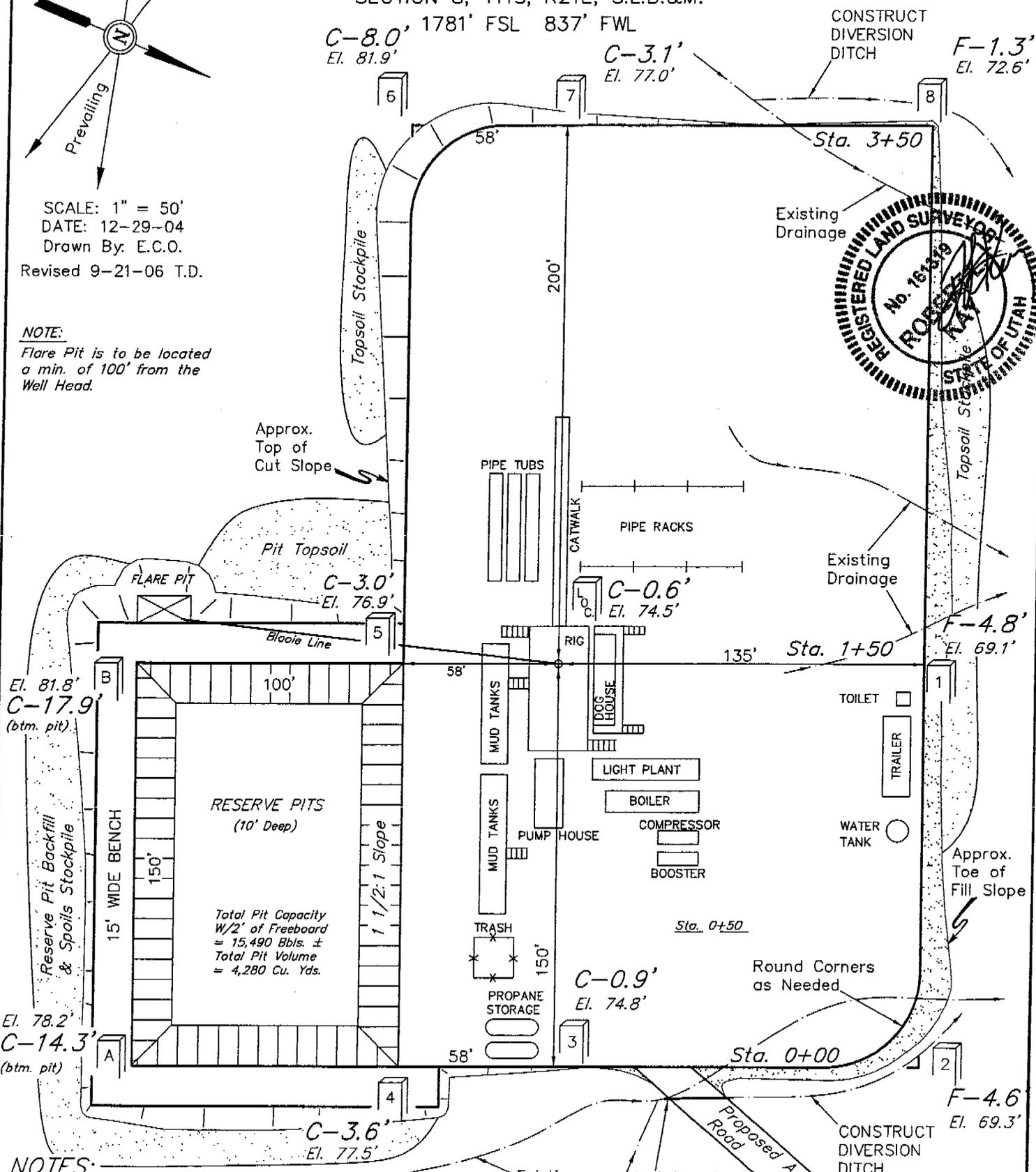


SCALE: 1" = 50'
DATE: 12-29-04
Drawn By: E.C.O.

Revised 9-21-06 T.D.

NOTE:

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



NOTES:

Elev. Ungraded Ground At Loc. Stake = 5574.5'
FINISHED GRADE ELEV. AT LOC. STAKE = 5573.9'

KEN McGEE OIL AND GAS ONE-RORE LP

FIGURE #2

TYPICAL CROSS SECTIONS FOR

LOVE #1121-8L

SECTION 8, T11S, R21E, S.L.B.&M.

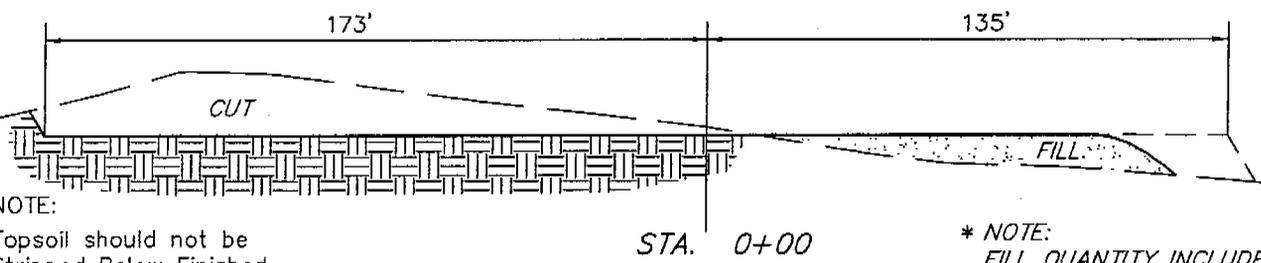
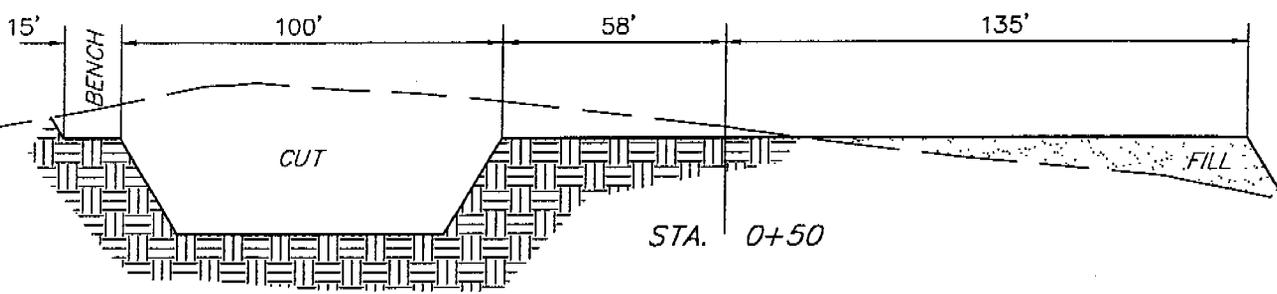
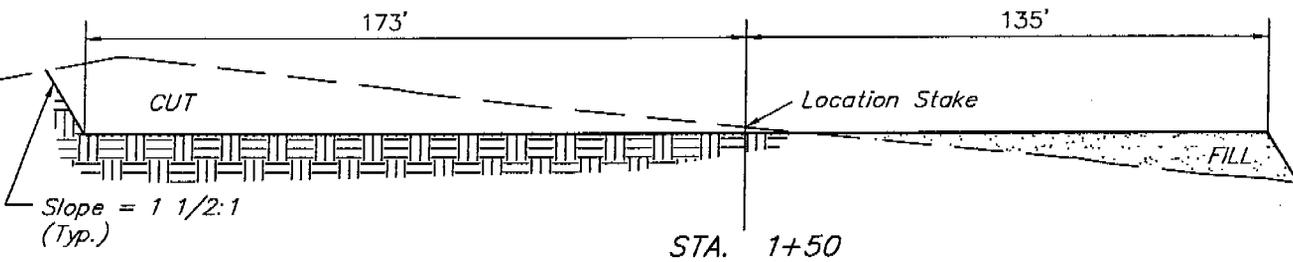
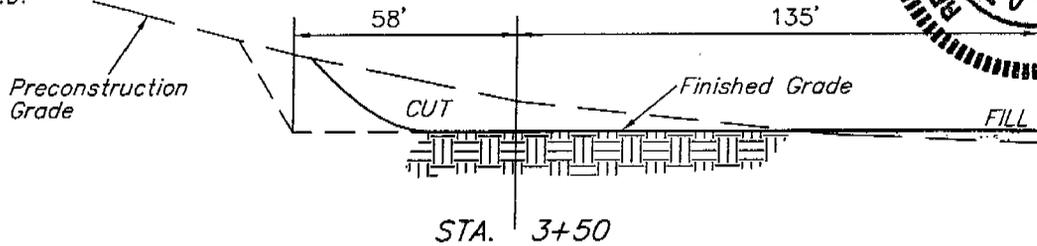
1781' FSL 837' FWL

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

DATE: 12-29-04

Drawn By: E.C.O.

Revised 9-21-06 T.D.



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	= 1,850 Cu. Yds.
Remaining Location	= 10,070 Cu. Yds.
TOTAL CUT	= 11,920 CU.YDS.
FILL	= 4,290 CU.YDS.

EXCESS MATERIAL	= 7,630 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 3,990 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 3,640 Cu. Yds.

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

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 10/20/2006

API NO. ASSIGNED: 43-047-38748

WELL NAME: LOVE 1121-8L
 OPERATOR: KERR-MCGEE OIL & GAS (N2995)
 CONTACT: SHEILA UPCHEGO

PHONE NUMBER: 435-781-7024

PROPOSED LOCATION:

NWSW 08 110S 210E
 SURFACE: 1781 FSL 0837 FWL
 BOTTOM: 1781 FSL 0837 FWL
 COUNTY: UINTAH
 LATITUDE: 39.87263 LONGITUDE: -109.5970
 UTM SURF EASTINGS: 619987 NORTHINGS: 4414353
 FIELD NAME: LOVE (622)

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal
 LEASE NUMBER: UTU-8345
 SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: WSMVD
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]
(No. WY-2357)
- 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)

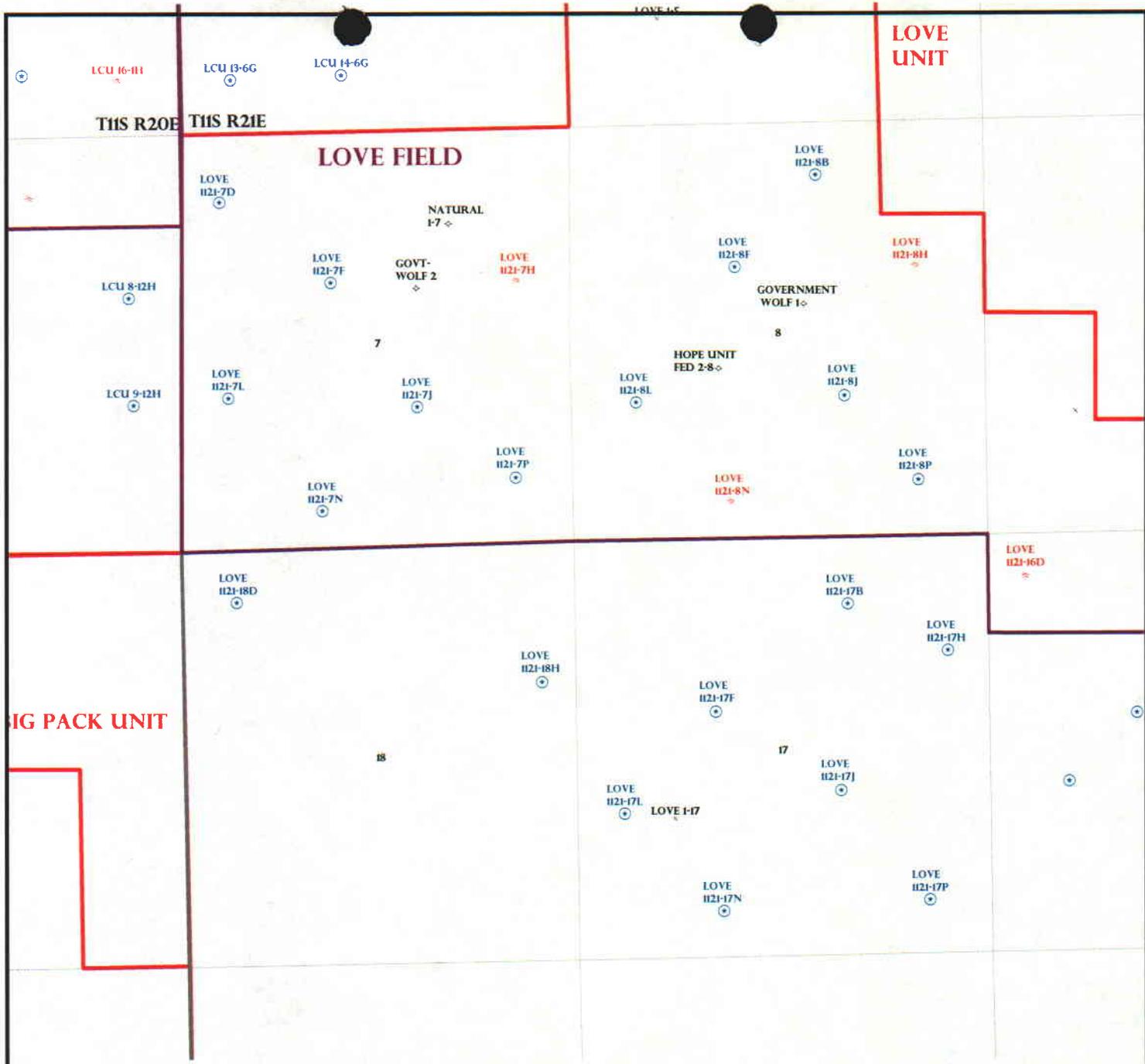
LOCATION AND SITING:

- _____ R649-2-3.
- Unit: _____
- R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
- _____ R649-3-3. Exception
- _____ Drilling Unit
Board Cause No: _____
Eff Date: _____
Siting: _____
- _____ R649-3-11. Directional Drill

COMMENTS: _____

STIPULATIONS: 1- Federal Approval

2- Spacing Slip



OPERATOR: KERR MCGEE O&G (N2995)

SEC: 7,8 T.11S R. 21E

FIELD: LOVE (622)

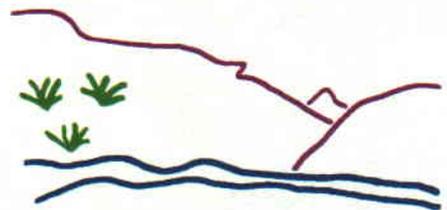
COUNTY: UINTAH

SPACING: R649-3-2 / GENERAL SITING

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

- Unit Status**
- EXPLORATORY
 - GAS STORAGE
 - NF PP OIL
 - NF SECONDARY
 - PENDING
 - P1 OIL
 - PP GAS
 - PP GEOTHERML
 - PP OIL
 - SECONDARY
 - TERMINATED

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



Utah Oil Gas and Mining



PREPARED BY: DIANA WHITNEY
DATE: 24-OCTOBER-2006



State of Utah

**Department of
Natural Resources**

MICHAEL R. STYLER
Executive Director

**Division of
Oil, Gas & Mining**

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

October 24, 2006

Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078

Re: Love 1121-8L Well, 1781' FSL, 837' FWL, NW SW, Sec. 8, T. 11 South,
R. 21 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 43-047-38748.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

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

Operator: Kerr-McGee Oil & Gas Onshore LP
Well Name & Number Love 1121-8L
API Number: 43-047-38748
Lease: UTU-8345

Location: NW SW Sec. 8 T. 11 South R. 21 East

Conditions of Approval

1. General

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

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

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

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

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

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

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

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Serial No.

UTU-8345

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

LOVE 1121-8L

9. API Well No.

4304738748

10. Field and Pool, or Exploratory Area

LOVE

11. County or Parish, State

UINTAH, UTAH

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator

KERR MCGEE OIL AND GAS ONSHORE LP

3a. Address

1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. (include area code)

435-781-7003

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

1781'FSL-837'FWL

NWSW SEC 8-T11S-R21E

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

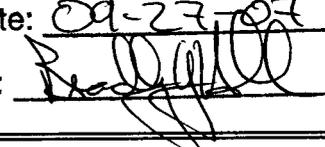
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other APD EXTENSION
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	DOG M
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

THE OPERATOR REQUESTS AUTHORIZATION FOR A ONE YEAR EXTENSION FOR THE SUBJECT WELL LOCATION SO THAT THE DRILLING OPERATIONS MAY BE COMPLETED. THE ORIGINAL APD WAS APPROVED BY THE DIVISION OF OIL AND GAS ON OCTOBER 24, 2006.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 09-27-07

By: 

9-28-07
RM

14. I hereby certify that the foregoing is true and correct

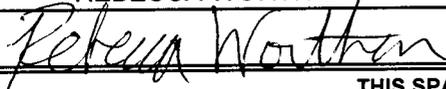
Name (Printed/Typed)

REBECCA WORTHEN

Title

LAND SPECIALIST

Signature



Date

September 17, 2007

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

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

Office

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

(Instructions on reverse)

RECEIVED

SEP 25 2007

**Application for Permit to Drill
Request for Permit Extension
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

API: 4304738748
Well Name: LOVE 1121-8L
Location: NWSW, SEC 8-T11S-R21E
Company Permit Issued to: KERR-MCGEE OIL AND GAS ONSHORE LP
Date Original Permit Issued: 10/24/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

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

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

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

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

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

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

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

Rebecca Wooten
Signature

9/17/2007
Date

Title: LAND SPECIALIST

Representing: Kerr McGee Oil and Gas Onshore LP

RECEIVED
SEP 25 2007
DIV. OF OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

RECEIVED

OCT 24 2006

BLM VERNAL, UTAH

1a. Type of Work: DRILL REENTER

b. Type of Well: Oil Well Gas Well Other Single Zone Multiple Zone

2. Name of Operator
KERR MCGEE OIL & GAS ONSHORE LP

3A. Address
1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. (include area code)
(435) 781-7024

4. Location of Well (Report location clearly and in accordance with any State requirements. *)
At surface **NWSW 1781'FSL, 837'FWL**
At proposed prod. Zone

14. Distance in miles and direction from nearest town or post office*
17.55 MILES SOUTH OF OURAY, UTAH

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) **837'**

16. No. of Acres in lease
2486.60

17. Spacing Unit dedicated to this well
40.00

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **REFER TO TOPO C**

19. Proposed Depth
9100'

20. BLM/BIA Bond No. on file
BOND NO: WY-2357 WYB000291

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
5575' UNGRADED GL

22. Approximate date work will start*

23. Estimated duration

5. Lease Serial No.
UTU-8345

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
LOVE 1121-8L

9. API Well No.
43-047-38748

10. Field and Pool, or Exploratory
UNDESIGNATED

11. Sec., T., R., M., or Blk, and Survey or Area
SEC. 8, T11S, R21E

12. County or Parish
UINTAH

13. State
UTAH

24. Attachments

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

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

25. Signature  Name (Printed/Typed) **SHEILA UPCHEGO** Date **10/11/2006**

Title **REGULATORY ANALYST**

Approved by (Signature)  Name (Printed/Typed) **Terry Kerzko** Date **1-16-2008**

Title **Assistant Field Manager** Office **VERNAL FIELD OFFICE**
Lands & Mineral Resources

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached. **CONDITIONS OF APPROVAL ATTACHED**

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

*(Instructions on reverse)

RECEIVED
JAN 22 2008

NOTICE OF APPROVAL

DIV. OF OIL, GAS & MINING

UDOGM

NID NOS

07BM4818A



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

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Kerr-McGee Oil & Gas Onshore LP
Well No: Love 1121-8L
API No: 43-047-38748

Location: NWSW, Sec. 8, T11S, R21E
Lease No: UTU-8345
Agreement: N/A

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
NRS/Enviro Scientist:		(435) 781-4475	(435) 828-4029
NRS/Enviro Scientist:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	
NRS/Enviro Scientist:		(435) 781-4476	
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Jannice Cutler	(435) 781-3400	(435) 828-3544
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545

Fax: (435) 781-3420

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

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

NOTIFICATION REQUIREMENTS

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

**SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.
- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.
- Once the location is plugged and abandoned, it shall be recontoured to natural contours, topsoil respread where appropriate, and the entire location seeded with the recommended seed mix. Seeding shall take place by broadcasting the seed and walking it into the soil with a dozer immediately after the dirt work is completed.
- The lessee/operator is given notice that lands in the lease have been identified as containing crucial pronghorn (antelope) habitat. It is requested that the lessee/operator not initiate surface disturbing activities or drilling from May 15 through June 20. A survey may be conducted by a qualified biologist or a BLM representative during this timing period to determine if pronghorn are in the area.

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

SITE SPECIFIC DOWNHOLE COAs:

- A formation integrity test shall be performed at the surface casing shoe.
- Production casing cement shall be brought to a minimum of 200' above the surface casing shoe.

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

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location ($\frac{1}{4}$ Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or

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

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

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

FORM 9

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.

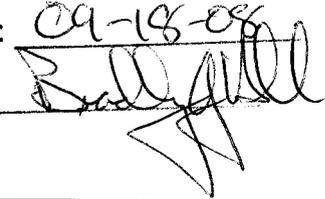
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-8345
2. NAME OF OPERATOR: Kerr McGee Oil and Gas Onshore, LP		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA
3. ADDRESS OF OPERATOR: PO Box 173779 CITY Denver STATE CO ZIP 80217-3779		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1781 FSL & 837 FWL		8. WELL NAME and NUMBER: Love 1121-8L
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSW 8 11S 21E		9. API NUMBER: 4304738748
COUNTY: Uintah		10. FIELD AND POOL, OR WILDCAT: Natural Buttes Field
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 (Submit in Duplicate) Approximate date work will start: _____ <input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<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 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 checked="" type="checkbox"/> OTHER: <u>APD Extension</u>
	<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.
 Kerr McGee Oil and Gas Onshore, LP respectfully requests a one year extension for Love 1121-8L, in order to complete drilling operations. The Utah Division of Oil, Gas, and Mining initially approved this APD on 10/24/2006.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 09-18-08
By: 

NAME (PLEASE PRINT) <u>Victoria Marques</u>	TITLE <u>Regulatory Intern</u>
SIGNATURE <u>Victoria Marques</u>	DATE <u>9/11/2008</u>

(This space for State use only)

COPY SENT TO OPERATOR
Date: 9.17.2008
Initials: KS

(See Instructions on Reverse Side)

RECEIVED
SEP 15 2008
DIV. OF OIL, GAS & MINING



**Application for Permit to Drill
Request for Permit Extension
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

API: 4304738748
Well Name: Love 1121-8L
Location: NSW 1781 FSL 837 FWL Sec. 8 T 11S R 21E
Company Permit Issued to: Kerr McGee Oil and Gas Onshore, LP
Date Original Permit Issued: 10/24/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

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

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

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

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

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

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

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

Victoria Marquez
Signature

9/11/2008
Date

Title: Regulatory Intern

Representing: Kerr McGee Oil and Gas Onshore, LP

**RECEIVED
SEP 15 2008**

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-8345
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: LOVE 1121-8L
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047387480000
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: 1781 FSL 0837 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 08 Township: 11.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: LOVE 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: 9/14/2009	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

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

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

Approved by the Utah Division of Oil, Gas and Mining

Date: September 14, 2009

By:

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 9/10/2009	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047387480000

API: 43047387480000

Well Name: LOVE 1121-8L

Location: 1781 FSL 0837 FWL QTR NWSW SEC 08 TWP 110S RNG 210E MER S

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

Date Original Permit Issued: 10/24/2006

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

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

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

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

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

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

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

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

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

Signature: Danielle Piernot

Date: 9/10/2009

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

Date: September 14, 2009

By: 

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-8345
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: LOVE 1121-8L
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047387480000
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: 1781 FSL 0837 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 08 Township: 11.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: LOVE 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: 10/20/2010	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

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

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

Date: October 25, 2010
By: 

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 10/19/2010	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047387480000

API: 43047387480000

Well Name: LOVE 1121-8L

Location: 1781 FSL 0837 FWL QTR NWSW SEC 08 TWP 110S RNG 210E MER S

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

Date Original Permit Issued: 10/24/2006

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

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

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

Signature: Danielle Piernot

Date: 10/19/2010

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

Date: October 25, 2010

By: 

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-8345
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:
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: LOVE 1121-8L
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047387480000
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: LOVE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1781 FSL 0837 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 08 Township: 11.0S Range: 21.0E 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: 10/24/2011 <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 type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.</p>		
		<p>Approved by the Utah Division of Oil, Gas and Mining</p> <p>Date: <u>09/27/2011</u></p> <p>By: </p>
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 9/20/2011



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047387480000

API: 43047387480000

Well Name: LOVE 1121-8L

Location: 1781 FSL 0837 FWL QTR NWSW SEC 08 TWNP 110S RNG 210E MER S

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

Date Original Permit Issued: 10/24/2006

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

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

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

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

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

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

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

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

Signature: Danielle Piernot

Date: 9/20/2011

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

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# PROPETRO #11
 Submitted By JAIME SCHARNOV Phone Number 720.929.6304
 Well Name/Number LOVE 1121-8L
 Qtr/Qtr NWSW Section 08 Township 11S Range 21E
 Lease Serial Number UTU-8345
 API Number 4304738748

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 01/03/2012 07:00 HRS AM PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 01/09/2012 08:00 HRS AM PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time _____ AM PM

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT
435.828.0986 OR LOVEL YOUNG AT 435.781.7051

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-8345
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: LOVE 1121-8L
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047387480000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6515 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1781 FSL 0837 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 08 Township: 11.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: LOVE COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 12/19/2011 <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 checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 50px;" type="text"/>

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

The operator requests approval for changes in the drilling plan. Specifically, the Operator requests approval to deepen to the Blackhawk formation (part of the Mesaverde Group), FIT Waiver, closed loop drilling option, surface casing size change, and a production casing change. All other aspects of the previously approved drilling plan will not change. These proposals do not deviate from previously submitted and approved plans. Please see attachments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: 12/29/2011

By:

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 12/19/2011	

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

LOVE 1121-8L
Surface: 1781 FSL / 837 FWL NWSW

Section 8 T11S R21E

Unitah County, Utah
Mineral Lease: UTU-8345

ONSHORE ORDER NO. 1

DRILLING PROGRAM

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

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	939'	
Birds Nest	1,134'	Water
Mahogany	1,406'	Water
Wasatch	4,073'	Gas
Mesaverde	6,880'	Gas
Sego	9,194'	Gas
Castlegate	9,291'	Gas
Blackhawk	9,634'	Gas
TVD	10,234'	
TD	10,234'	

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 bottom hole pressure calculated at 10234' TVD, approximately equals
6,754 psi (0.66 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 4,550 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

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

8. **Anticipated Starting Dates:**

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

9. **Variances:**

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

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

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

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

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

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

Background

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

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

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

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

Variance for BOPE Requirements

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

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

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

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

Variance for FIT Requirements

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

Conclusion

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

10. Other Information:

Please refer to the attached Drilling Program.

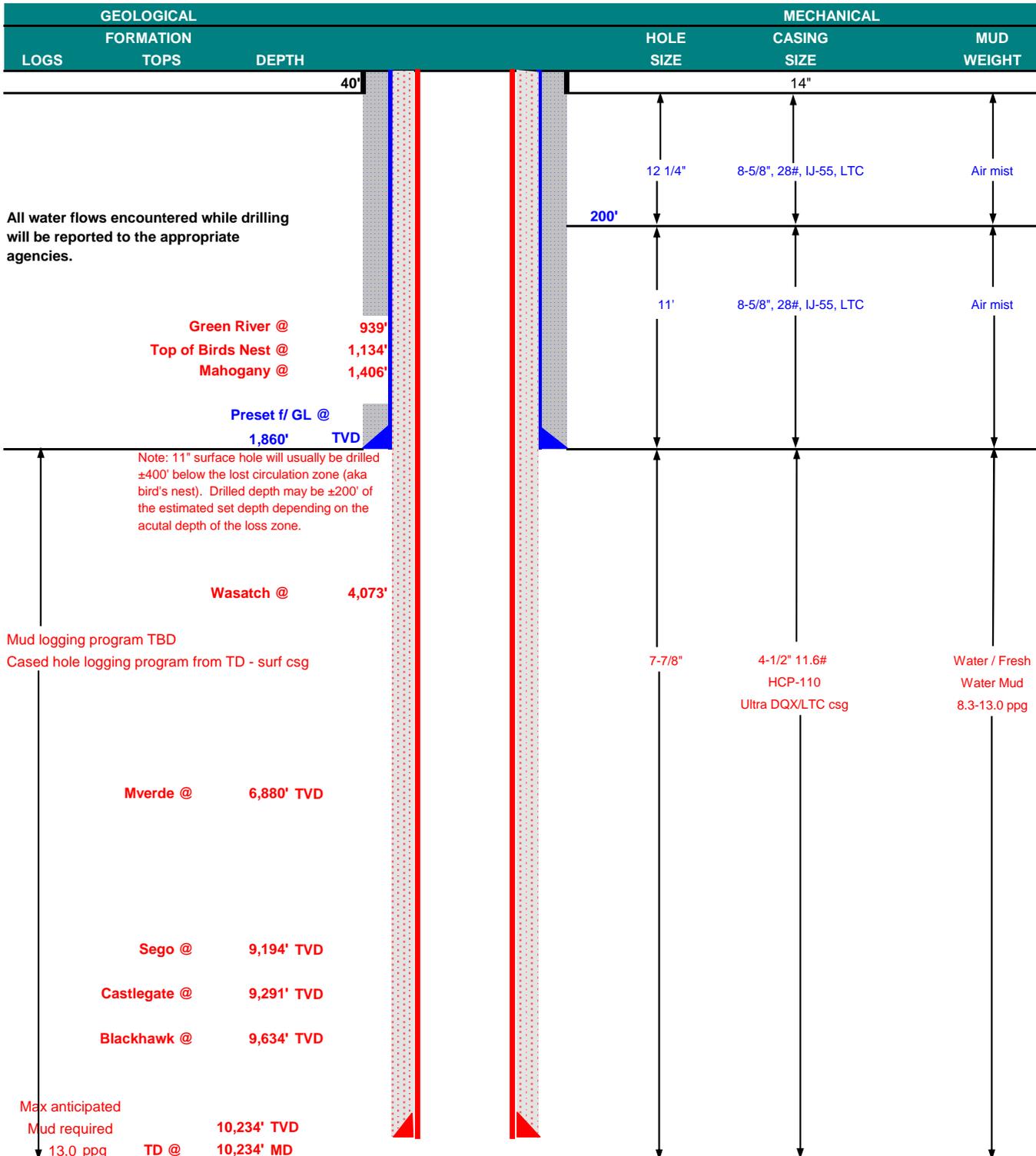
Love 1121-8L

Drilling Program
5 of 7



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	December 19, 2011		
WELL NAME	LOVE 1121-8L		TD	10,234'	TVD	10,234' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	
SURFACE LOCATION	NWSW	1781 FSL	837 FWL	Sec 8	T 11S	R 21E
	Latitude:	39.872683	Longitude:	-109.596969	NAD 83	
OBJECTIVE ZONE(S)	BLACKHAWK (Part of the Mesaverde Group)					
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.					



Love 1121-8L

Drilling Program
6 of 7



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

							DESIGN FACTORS			
							LTC		DQX	
	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION	
CONDUCTOR	14"	0-40'								
							3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to 1,860	28.00	IJ-55	LTC	2.89	2.16	7.63	N/A
							10,690	8,650	279,000	367,000
PRODUCTION	4-1/2"	0	to 5,000	11.60	HCP-110	DQX	1.19	1.25		3.86
	4-1/2"	5,000	to 10,234'	11.60	HCP-110	LTC	1.19	1.25	5.73	

Surface Casing:

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

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

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

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

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
Option 1							
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
SURFACE			NOTE: If well will circulate water to surface, option 2 will be utilized				
Option 2							
	LEAD	1,360'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	130	35%	11.00	3.82
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	3,564'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	290	35%	12.00	3.38
	TAIL	6,670'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,570	35%	14.30	1.31

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

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

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

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

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

DRILLING ENGINEER:

Nick Spence / Danny Showers / Chad Loesel

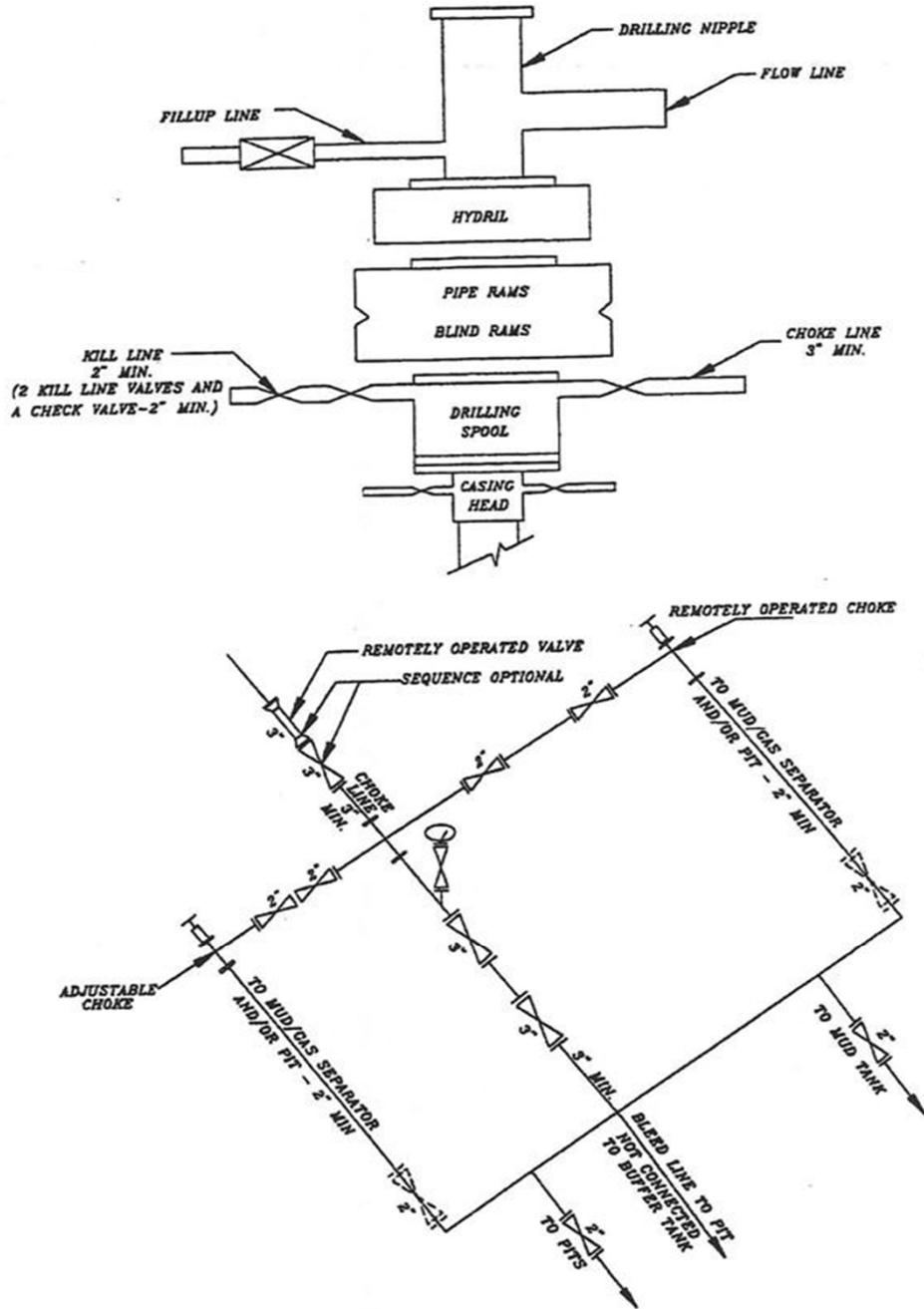
DATE:

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE:

**EXHIBIT A
LOVE 1121-8L**



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Requested Drilling Options:

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-8345
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: LOVE 1121-8L	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047387480000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6510	9. FIELD and POOL or WILDCAT: LOVExt
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1781 FSL 0837 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 08 Township: 11.0S Range: 21.0E 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"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 1/4/2012	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER	
	OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
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 ON 01/04/2012 AT 0830 HRS.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY January 11, 2012		
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 1/10/2012	

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

FORM 6

ENTITY ACTION FORM

Operator: KERR MCGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995
 Address: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078 Phone Number: (435) 781-7024

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304738749	LOVE 1121-8J		NWSE	8	11S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
A	99999	18367	1/3/2012		1/18/2012		
Comments: MIRU PETE MARTIN BUCKET RIG. <i>MVRD</i> SPUD WELL LOCATION ON 01/03/2012 AT 1300 HRS.							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304738748	LOVE 1121-8L		NWSW	8	11S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
A	99999	18368	1/4/2012		1/18/2012		
Comments: MIRU PETE MARTIN BUCKET RIG. <i>MVRD</i> SPUD WELL LOCATION ON 01/04/2012 AT 0830 HRS.							

Well 3

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

ACTION CODES:

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

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

Title

1/10/2012

Date

(5/2000)

RECEIVED

JAN 10 2012

DIV. OF OIL, GAS & MINING

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9			
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-8345			
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME:			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		8. WELL NAME and NUMBER: LOVE 1121-8L			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		9. API NUMBER: 43047387480000			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1781 FSL 0837 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 08 Township: 11.0S Range: 21.0E Meridian: S		9. FIELD and POOL or WILDCAT: LOVExt COUNTY: UINTAH STATE: UTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
TYPE OF SUBMISSION <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 2/2/2012	TYPE OF ACTION				
	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <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 </td> <td style="width: 33%; vertical-align: top;"> <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 </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU AIR RIG ON JAN. 31, 2012. DRILLED SURFACE HOLE TO 1898'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.					
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY February 03, 2012					
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regularatory Analyst			
SIGNATURE N/A	DATE 2/3/2012				

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-8345
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: LOVE 1121-8L
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047387480000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6510
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1781 FSL 0837 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 08 Township: 11.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: LOVExt 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: 2/22/2012	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
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	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

The Operator requests approval for changes in the drilling plan. Specifically, the Operator requests approval for a production casing change to 4-1/2 inch I-80 11.6 LB Ultra DQX/LTC casing. Please see the attachment. Thank you.

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

Date: March 05, 2012

By: *David K. Quist*

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 2/22/2012	

Kerr-McGee Oil & Gas Onshore. L.P.**LOVE 1121-8L**

Surface: 1781 FSL / 837 FWL NWSW
 BHL: 1781 FSL / 837 FWL NWSW

Section 8 T11S R21E

Unitah County, Utah
 Mineral Lease: UTU-8345

ONSHORE ORDER NO. 1**DRILLING PROGRAM**

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

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	939	
Birds Nest	1134	Water
Mahogany	1405	Water
Wasatch	4073	Gas
Mesaverde	6879	Gas
Sego	9194	Gas
TD	9194	

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 bottom hole pressure calculated at 9194' TVD, approximately equals
5,884 psi (0.64 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 3,849 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

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

8. Anticipated Starting Dates:

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

9. Variances:

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

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

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

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

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

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

Background

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

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

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

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

Variance for BOPE Requirements

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

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

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

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

Variance for FIT Requirements

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

Conclusion

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

10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	COLLAPSE	LTC	DQX
								TENSION	
CONDUCTOR	14"	0-40'							
						3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0 to 1,910	28.00	IJ-55	LTC	2.82	2.10	7.43	N/A
						7,780	6,350	223,000	267,035
PRODUCTION	4-1/2"	0 to 5,000	11.60	I-80	DQX	1.11	1.06		3.10
	4-1/2"	5,000 to 9,194'	11.60	I-80	LTC	1.11	1.06	5.67	

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe
Fracture at surface shoe with 0.1 psi/ft gas gradient above

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

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient

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

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD 500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
Option 1	TOP OUT CMT (6 jobs) 1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
NOTE: If well will circulate water to surface, option 2 will be utilized						
SURFACE	LEAD 1,410'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	130	35%	11.00	3.82
Option 2	TAIL 500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD 3,564'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	290	35%	11.00	3.38
	TAIL 5,630'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,330	35%	14.30	1.31

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

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

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

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

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

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

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

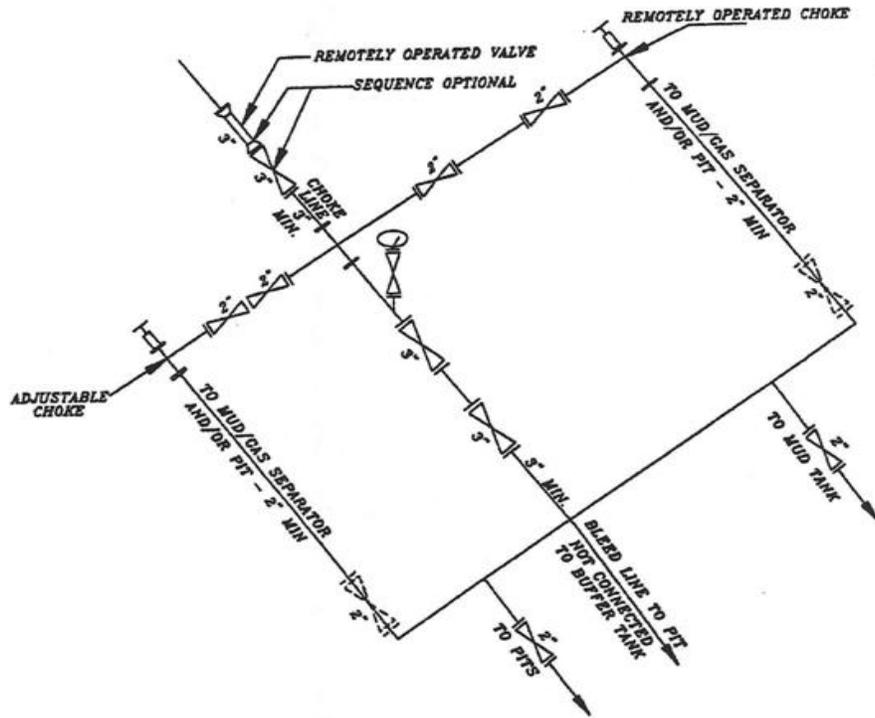
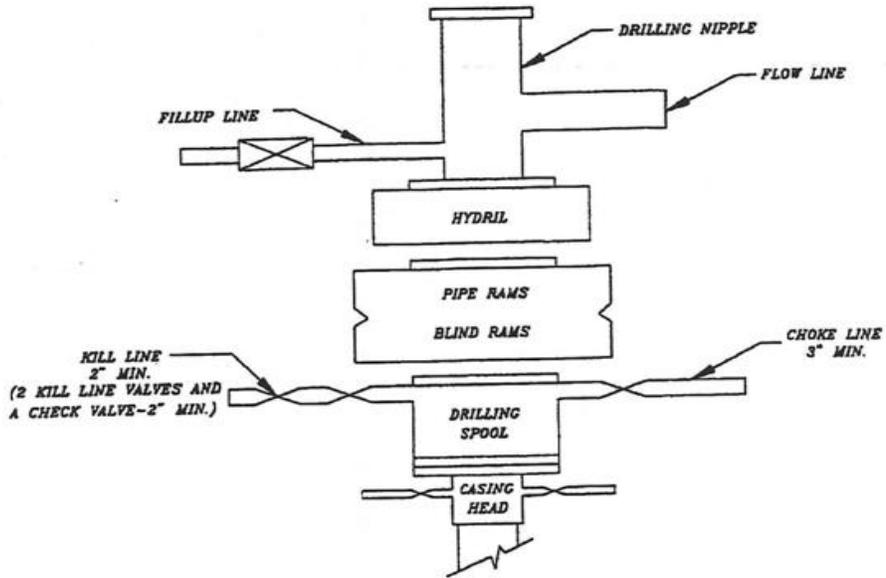
DRILLING ENGINEER: _____
Nick Spence / Danny Showers / Chad Loesel

DATE: _____

DRILLING SUPERINTENDENT: _____
Kenny Gathings / Lovel Young

DATE: _____

EXHIBIT A
LOVE 1121-8L



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-8345
1. TYPE OF WELL Gas Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	8. WELL NAME and NUMBER: LOVE 1121-8L
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6516
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1781 FSL 0837 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 08 Township: 11.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: LOVExt COUNTY: UINTAH STATE: UTAH

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

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<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: 4/1/2012	<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
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	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON APRIL 1, 2012 AT 8:15 A.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 April 02, 2012**

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regularatory Analyst
SIGNATURE N/A	DATE 4/2/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-8345	
SUNDRY NOTICES AND REPORTS ON WELLS	
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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME:	
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: LOVE 1121-8L
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047387480000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6516
9. FIELD and POOL or WILDCAT: LOVExt	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1781 FSL 0837 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 08 Township: 11.0S Range: 21.0E Meridian: S	
COUNTY: UINTAH	
STATE: UTAH	

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<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 3/11/2012	<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
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	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

MIRU ROTARY RIG. FINISHED DRILLING FROM 1898' TO 9194' ON 3/8/2012. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED SST 54 RIG ON 3/11/2012 @ 12:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 May 04, 2012**

NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER 720 929-6086	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 4/30/2012	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
UTU8345

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator **KERR MCGEE OIL & GAS ONSHORE** Contact: CARA MAHLER
Mail: cara.mahler@anadarko.com

8. Lease Name and Well No.
LOVE 1121-8L

3. Address 1099 18TH STREET, SUITE 1800
DENVER, CO 80202

3a. Phone No. (include area code)
Ph: 720-929-6029

9. API Well No.
43-047-38748

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface NWSW 1781FSL 837FWL 39.872649 N Lat, 109.597657 W Lon
At top prod interval reported below NWSW 1781FSL 837FWL 39.872649 N Lat, 109.597657 W Lon
At total depth NWSW 1781FSL 837FWL 39.872649 N Lat, 109.597657 W Lon

10. Field and Pool, or Exploratory
NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey
or Area Sec 8 T11S R21E Mer SLB

12. County or Parish
UINTAH 13. State
UT

14. Date Spudded
01/04/2012

15. Date T.D. Reached
03/11/2012

16. Date Completed
 D & A Ready to Prod.
04/01/2012

17. Elevations (DF, KB, RT, GL)*
5574 GL

18. Total Depth: MD 9194
TVD 9191

19. Plug Back T.D.: MD 9149
TVD 9146

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
BHV-BHS-DSN/SD/ACTR-CBL

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

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 IJ-55	28.0	0	1873		820		0	
7.875	4.500 I-80	11.6	0	9174		1815		1180	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	8045							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WASATCH	6411	6989	6411 TO 6989	0.360	48	OPEN
B) MESAVERDE	7198	8652	7198 TO 8652	0.360	90	OPEN
C)						
D)						

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

Depth Interval	Amount and Type of Material
6885 TO 8652	PUMP 5459 BBLs SLICK H2O & 136,286 LBS 30/50 OTTAWA SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
04/01/2012	04/06/2012	24	→	40.0	1168.0	580.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	SI	796	→	40	1168	580		PGW	

28a. Production - Interval B

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

RECEIVED
MAY 15 2012

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

ELECTRONIC SUBMISSION #137317 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

DIV. OF OIL, GAS & MINING

28b. Production - Interval C

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

28c. Production - Interval D

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

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GREEN RIVER BIRD'S NEST WASATCH MESAVERDE	947 1139 4038 7010

32. Additional remarks (include plugging procedure):

The first 210' of the surface hole was drilled with a 12 ?? bit. The remainder of surface hole was drilled with an 11? bit. DQX csg was run from surface to 5046?; LTC csg was run from 5046? to 9194?. Attached is the chronological well history, perforation report & final survey.

33. Circle enclosed attachments:

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

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

**Electronic Submission #137317 Verified by the BLM Well Information System.
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal**

Name (please print) CARA MAHLER Title AUTHORIZED REPRESENTATIVE

Signature _____ (Electronic Submission) Date 05/10/2012

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

**US ROCKIES REGION
Operation Summary Report**

Well: LOVE 1121-8L		Spud Date: 1/31/2012	
Project: UTAH-UINTAH		Site: LOVE 1121-8L	Rig Name No: PROPETRO 11/11, SST 54/54
Event: DRILLING		Start Date: 1/31/2012	End Date: 3/11/2012
Active Datum: RKB @5,592.00usft (above Mean Sea Level)		UWI: NW/SW/0/11/S/21/E/8/0/0/26/PM/S/1781/W/0/837/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
1/31/2012	5:00 - 17:30	12.50	MIRU	01	A	P		MOVE RIG ONTO LOCATION F/NBU 921-11N DERRICK IN AIR 16:30 RELEASE JD TRUCKS 13:00 (WELL 1/1). INSTALL DIVERTOR HEAD AND BLUEY LINE. BUILD DITCH. SPOT IN RIG. SPOT IN CATWALK AND PIPE RACKS. RIG UP PIT PUMP. RIG UP PUMP. PRIME PUMP. INSPECT RIG. HELD PRE-SPUD SAFETY MEETING.
	17:30 - 19:30	2.00	PRPSPD	01	B	P		P/U MOTOR & 12 1/4 BIT SPUD 01/31/2012 @ 20:30
	19:30 - 20:30	1.00	DRLSUR	01	E	P		DRILL 12.25" HOLE 44'- 210'. (166', 140'/HR) RPM=40, WOB 5-15K. PSI ON/OFF 600/400. UP/DOWN/ ROT 20/20/20 K. DRAG 0 K. CIRC RESERVE W. 8.3# WATER. DRILL DOWN TO 127' W/ 6" COLLARS.
	20:30 - 21:30	1.00	DRLSUR	02	B	P		TOOH LDDP & BHA CHANGE OUT MUD MOTOR / TIH W/11" BIT #2 BHA TO 210'
2/1/2012	0:00 - 1:00	1.00	DRLSUR	06	A	P		TIH W/TOOLS
	1:00 - 4:00	3.00	DRLSUR	02	B	P		DRILL F/210 T/610 (1287' @ 133.33' PER HR) WOB 20K, PSI ON/OFF 1000/900, RPM 50 UP/DWN/ROT 38/32/35
	4:00 - 5:00	1.00	DRLSUR	08	A	Z		FIX PUMP
	5:00 - 16:00	11.00	DRLSUR	02	B	P		DRILL F/610-1897' (400' @ 116' PER HR) WOB 20K, PSI ON/OFF 1450/1250, RPM 40 UP/DWN/ROT 72/65/67
	16:00 - 18:00	2.00	DRLSUR	05	D	P		CIRC. F/CSNG
	18:00 - 20:30	2.50	DRLSUR	06	D	P		LDDS, BHA & DIR. TOOLS
	20:30 - 21:30	1.00	DRLSUR	12	A	P		MOVE PIPE RACKS AND CATWALK. PULL DIVERTER HEAD. RIG UP TO RUN CSG. AND MOVE CSG INTO POSITION TO P/U.
	21:30 - 23:30	2.00	DRLSUR	12	C	P		RUN 42 JTS 8 5/8, 28# CSNG. LAND CSNG @ 23:30, SHOE SET @ 1859', BAFFLE SET @ 1813'
2/2/2012	23:30 - 0:00	0.50	DRLSUR	05	D	P		PUMP PIT DOWN
	0:00 - 1:00	1.00	CSG	12	B	P		HOLD SAFETY MEETING, RUN 200' OF 1". RIG DOWN RIG MOVE OFF WELL, REBUILD DITCH. RIG UP CEMENT TRUCK, 2" HARD LINES,. CEMENT HEAD, LOAD PLUG.
	1:00 - 2:00	1.00	CSG	12	E	P		PRESSURE TEST LINES TO 2000 PSI. PUMP 100 BBLS OF WATER AHEAD. PUMP 20 BBLS OF 8.3# GEL WATER AHEAD. PUMP (170 SX) 115.6 BBLS OF 11.0# 3.82 YD 23 GAL/SK PREMIUM CEMENT WITH 16% GEL, 3% SALT. 3# PER SX GR3, .25# ER SC FLOCELE, 10# PER SX GILSONITE. PUMP 200 SX TAIL, 2% CACL, .25# PER SX FLOCELE. DROP PLUG ON FLY. DISLPACE WITH 110 BBLS OF H2O. NO CIRC THROUGHOUT. FINAL LIFT 150PSI AT 4. BBLS MIN. BUMP PLUG WITH 500 PSI HELD FOR 5 MIN. FLOAT HELD. PUMP 125 SX (26.6 BBLS) OF SAME TAIL CEMENT WITH 2% CACL DOWN 1". SHUT DOWN AND CLEAN TRUCK. NO CEMENT TO SURFACE.
	2:00 - 2:00	0.00	CSG	13	A	P		WOC (RELEASE RIG @ 02:00

**US ROCKIES REGION
Operation Summary Report**

Well: LOVE 1121-8L Spud Date: 1/31/2012
 Project: UTAH-UINTAH Site: LOVE 1121-8L Rig Name No: PROPETRO 11/11, SST 54/54
 Event: DRILLING Start Date: 1/31/2012 End Date: 3/11/2012
 Active Datum: RKB @5,592.00usft (above Mean Sea Level) UWI: NW/SW/0/11/S/21/E/8/0/0/26/PM/S/1781/NW/0/837/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	2:00 - 2:00	0.00	CSG	12	E	P		PUMP 100 SKS 15.8# CMT DOWN BACKSIDE NO CMT T/SURFACE
	2:00 - 2:00	0.00	CSG	12	E	P		PUMP 125 SKS 15.8# CMT DOWN BACKSIDE NO CMT T/SURFACE
	2:00 - 2:00	0.00	CSG	13	A	P		WOO
	2:00 - 2:00	0.00	CSG	12	E	P		PUMP 100 SKS 15.8# CMT DOWN BACKSIDE NO CMT T/SURFACE
	2:00 - 2:00	0.00	CSG	13	A	P		WOO
3/2/2012	16:00 - 19:00	3.00	RDMO	01	E	P		TEAR DOWN, RIG DOWN TOP DRIVE, LAY DERRICK OVER PREPARE FOR TRUCKS.
	19:00 - 0:00	5.00	RDMO	01	E	P		TEAR DOWN PREPARE FOR TRUCKS
3/3/2012	0:00 - 7:00	7.00	RDMO	01	E	P		TEAR DOWN PREPARE FOR TRUCKS
	7:00 - 7:30	0.50	RDMO	01	E	P		SAFETY MEETING ON RIG MOVE
	7:30 - 13:00	5.50	RDMO	01	E	P		RIG DOWN MOVE TO NEW LOCATION. RIG 100% MOVED
	13:00 - 18:00	5.00	MIRU	01	B	P		MOVE IN RIG UP, RAISE DERRICK, RIG UP GROUND SUPPORT.
	18:00 - 0:00	6.00	MIRU	01	B	P		WINTERIZING RIG, PREPARE FOR TOP DRIVE. RIG UP 90%, TRUCK ON LOCATION FOR RIG UP TOP DRIVE IN AM. R W JONES TRUCKS ON LOCATION 12 FOR MOVE, 2 FORKLIFTS, 6 LOW BOY, 3 FLAT BED, 1 CRAIN, 3 POLIT CARS, 2 FLAG MAN, 1 SAFETY MAN, 2 PUSHERS, 4 SWAMPERS, 12 DRIVERS, 1 CRAIN OPERATOR, 2 HELPERS, 1 CRAIN HALL TRUCK, + H & H TRUCKING W/ LOWBOY AND DRIVER, 2 TARGET TRUCKS + 2 DRIVERS, MOUNTWEST, 2 HALL TRUCKS WITH LOWBOYS, 2 DRIVERD, 2 PUSHERS, 4 HELPERS, 2 ONE TON, 2 PICKUPS, + CG ELECTRIC, 1 PICKUP, 1 ELECTRICIAN.
3/4/2012	0:00 - 6:00	6.00	MIRU	01	B	P		RIG UP, PUMPS, PITS, ELECTRIC CABLES, MUD LINES,
	6:00 - 10:00	4.00	MIRU	01	B	P		PICK UP, RIG UP TOP DRIVE, FILL MUD TANKS WITH PIT WATER,
	10:00 - 12:00	2.00	MIRU	14	A	P		NIPPLE UP STRATA SYSTEM
	12:00 - 14:00	2.00	MIRU	14	A	P		NIPPLE UP BOP HYD. LINES, CHOCK LINES, FLOW LINE.
	14:00 - 18:00	4.00	DRLPRV	15	A	P		TEST BOP, BLIND, PIPE, RAMS, CHOKE MANIFOLD, CHOKE LINE, KILL LINE, BOP, ALL VALVES, SAFETY VALVE ALL 250 LOW 5000 HIGH. 5/10 MINS. ANNULAR 2500 5/10 MINS. STRATA SYSTEM 3000, CASING 1500 FOR 30 MINS. GOOD TEST
	18:00 - 0:00	6.00	DRLPRV	06	A	P		INSTALL WEAR BUSHING PU MU DIRECTIONAL TOOLS ORIENT MOTOR, PU BHA TEST MOTOR T I H PU DRILL PIPE.
3/5/2012	0:00 - 0:30	0.50	DRLPRV	06	A	P		PU DP TRIP IN TAG CEMENT@ 1,755
	0:30 - 1:00	0.50	DRLPRV	06	A	P		RD LAYDOWN MACHINE
	1:00 - 2:00	1.00	DRLPRV	09	A	P		CUT DRILLING LINE 141'
	2:00 - 2:30	0.50	DRLPRV	02	F	P		DRILL CEMENT & FLOAT EQU. F/ 1,755 TO 1,911, FLOAT@ 1,827, SHOE,@ 1,871

**US ROCKIES REGION
Operation Summary Report**

Well: LOVE 1121-8L Spud Date: 1/31/2012
 Project: UTAH-UINTAH Site: LOVE 1121-8L Rig Name No: PROPETRO 11/11, SST 54/54
 Event: DRILLING Start Date: 1/31/2012 End Date: 3/11/2012
 Active Datum: RKB @5,592.00usft (above Mean Sea Level) UWI: NW/SW/0/11/S/21/E/8/0/0/26/PM/S/1781/NW/0/837/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	2:30 - 14:30	12.00	DRLPRV	02	B	P		DRILL/ROTATE/SLIDE/SURVEY, F/ 1,911 TO 3,217, AROP 108.83, WOB 18/20K, TDRPM 50/55 MMRPM 87,TOTAL RPM 137, DIFF. 290/316 GPM.507 PSI ON/OFF 1,570/ 1,300,TORQUE ON/OFF 6285/5980. DEWATERING 14 HRS. SHOW# 1 3,910 TO 3,954 OIL RIG SERVICE
	14:30 - 15:00	0.50	DRLPRV	07	A	P		RIG SERVICE
	15:00 - 0:00	9.00	DRLPRV	02	B	P		DRILL/ROTATE/SLIDE/SURVEY, F/ 3,217 TO 4,520, AROP,144.7 WOB 18/20K, TDRPM 50/55 MMRPM 87,TOTAL RPM 137, DIFF. 215/335 GPM.507 PSI ON/OFF 1,570/ 1,325,TORQUE ON/OFF 8665/5875. DEWATERING 9 HRS. 5.84 N. & 13.63 W. ROT.98.39% SLIDE 1.61 %
3/6/2012	0:00 - 15:00	15.00	DRLPRO	02	B	P		DRILL/ROTATE/SLIDE/SURVEY, F/ 4,520 TO 6,077, AROP,103.8 WOB 18/20K, TDRPM 67 MMRPM 87,TOTAL RPM 154, DIFF. 315 GPM.507 PSI ON/OFF 1,870/ 1,525,TORQUE ON/OFF 7500/4600. DEWATERING 15 HRS. WITH HIGH ROTARY P RATE SLOW ROT.97.85% SLIDE 2.15 % RIG SERVICE FUNCTION BOP & C-O-MATIC
	15:00 - 15:30	0.50	DRLPRO	07	A	P		RIG SERVICE FUNCTION BOP & C-O-MATIC
	15:30 - 0:00	8.50	DRLPRO	02	B	P		DRILL/ROTATE/SLIDE/SURVEY, F/ 6'077 TO 6,840, AROP,89.7 WOB 18/20K, TDRPM 50 MMRPM 87,TOTAL RPM 137, DIFF. 212/325 GPM.507 PSI ON/OFF 2,040/ 1,720,TORQUE ON/OFF 7625/5430. DEWATERING, 5 HRS. STOP FOR MUD UP ROT.95.65% SLIDE 4.37 % SHOW 4634 - 4677 GAS 6,636 U STRATA NO LINE ANN.66 PSI. MUD WT. 8.8 VIS. 30
3/7/2012	0:00 - 15:00	15.00	DRLPRV	02	B	P		RILL/ROTATE/SLIDE/SURVEY, F/ 6'840 TO 7,983, AROP,76.2 WOB 20K, TDRPM 48/65 MMRPM 87,TOTAL RPM 137, DIFF. 180/265 GPM.507 PSI ON/OFF 2,300/ 2,050,TORQUE ON/OFF 9800/5430. DEWATERING, 10 HRS ROT.98.65% SLIDE 1.35 % STRATA NO LINE ANN. 90 PSI. TO STOP RUNNING SHALE MUD WT. 8.6 VIS. 29 RIG SERVICE, FUNCTION BOP&C-O-M
	15:00 - 15:30	0.50	DRLPRV	02	B	P		RIG SERVICE, FUNCTION BOP&C-O-M

US ROCKIES REGION
Operation Summary Report

Well: LOVE 1121-8L		Spud Date: 1/31/2012	
Project: UTAH-UINTAH		Site: LOVE 1121-8L	Rig Name No: PROPETRO 11/11, SST 54/54
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Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	15:30 - 0:00	8.50	DRLPRV	02	B	P		RILL/ROTATE/SLIDE/SURVEY, F/ 7,983 TO 8,647 AROP,78.1 WOB 20/22K, TDRPM 48/65 MMRPM 87,TOTAL RPM 137, DIFF. 175/245 GPM.507 PSI ON/OFF 2,225/ 1,975,TORQUE ON/OFF 9080/4900. DEWATERING, 8 HRS ROT.93.62% SLIDE 3.04% SHOW 8192-8226 GAS 4035 U SHOW 8244-8270 GAS 2325 U SHOW 8298-8331 GAS 2195 U STRATA NO LINE ANN. 90 PSI. TO STOP RUNNING SHALE
3/8/2012	0:00 - 8:00	8.00	DRLPRO	02	B	P		MUD WT. 8.6 VIS. 29 RILL/ROTATE/SLIDE/SURVEY, F/ 8,647 TO 9,194 AROP,68.3 WOB 22/24K, TDRPM 48/55 MMRPM 87,TOTAL RPM 137, DIFF. 175/245 GPM.507 PSI ON/OFF 2,225/ 1,975,TORQUE ON/OFF 9080/4900. DEWATERING, 8 HRS STRATA NO LINE ANN. 90/100 PSI. TO STOP RUNNING SHALE MUD WT. 8.6 VIS. 29 SHOW 8370 TO 8401 GAS 1465 U SHOW 8760 TO 8778 GAS 2130 U SHOW 8870 TO 8900 GAS 3165 U SHOW 8931 TO 8960 GAS 2205 U
	8:00 - 12:30	4.50	DRLPRO	05	A	P		TD 9,194 @ 08:00 3/8/12 CIRC. DISPLACE HOLE WITH KILL MUD 11.5 PPB @ 60 SPM CIRC. 85 SPM COND. MUD 11.5, 37 VIS. IN & OUT
	12:30 - 18:30	6.00	DRLPRO	06	A	P		TOOH TIGHT F/ 9,190 TO 9,100,WORK PIPE 50 TO 75K OVER PULL,TIGHT F/8,901 TO 8,835 70K OVER,TIGHT SPOT AT 3,935 WORK PIPE 25TO 35K STICKEY, PULLED TIGHT ALL THE WAY TO THE SHOE 35 TO 40K OVER.
	18:30 - 19:30	1.00	DRLPRO	06	A	P		LAY DOWN BHA BIT, BOTTOM 5' OF MOTOR BALLED FROM PULLING THROUGH TIGHT SPOTS, BIT IN GOOD COND.
	19:30 - 20:00	0.50	DRLPRO	06	E	P		CLEAN FLOOR P/U BIT SUB M/U BIT TIH W/ HWDP, INSTALL ROT. HEAD.
	20:00 - 21:00	1.00	DRLPRO	06	E	P		TIH TAG AT 3,645 TIGHT SPOTS
	21:00 - 0:00	3.00	DRLPRO	03	E	P		WASH REAM F/3,645 TO 5,500 HEAVY CUTTINGS & SHALE OVER SHAKER
3/9/2012	0:00 - 4:00	4.00	DRLPRV	03	A	P		REAMING TIGHT HOLE F/ 5500 TO 9194
	4:00 - 7:30	3.50	DRLPRV	05	A	P		CIRC.COND.MUD TO WT. 11.5, VIS 60 FOR LOG
	7:30 - 13:00	5.50	DRLPRV	06	E	P		TOOH TIGHT SPOT 4681,4648,5200,5000,3903,3831, BACK REAM SAFETY MEETING RIG UP TO LOG
	13:00 - 14:30	1.50	DRLPRV	11	G	P		LOG WELL QUAD COMBO LOGGERS TD 9,204,
	14:30 - 21:00	6.50	DRLPRV	11	G	P		RIG DOWN HALCO.
	21:00 - 21:30	0.50	DRLPRV	11	G	P		TIH TO SHOE
	21:30 - 22:30	1.00	DRLPRV	06	A	P		CUT DRILLING 89'
	22:30 - 23:30	1.00	DRLPRV	09	A	P		TIH FOR LD & RUN CSG.
	23:30 - 0:00	0.50	DRLPRV	06	A	P		

US ROCKIES REGION
Operation Summary Report

Well: LOVE 1121-8L Spud Date: 1/31/2012
 Project: UTAH-UINTAH Site: LOVE 1121-8L Rig Name No: PROPETRO 11/11, SST 54/54
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Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/10/2012	0:00 - 2:30	2.50	DRLPRV	06	A	P		TIH FOR LAY DOWN DRILL PIPE
	2:30 - 4:00	1.50	DRLPRV	05	A	P		CIRC.BOTTOMS UP COND. MUD FOR CASING RUN.
	4:00 - 11:30	7.50	DRLPRV	06	A	P		LAY DOWN DRILL PIPE FOR CASING RUN PULL WEAR BUSHING
	11:30 - 13:30	2.00	DRLPRV	12	A	P		SAFETY MEETING,RIG UP FRANK'S CASING TWO BED TRUCKS 4 HRS 1 PUSHER 2 DRIVERS 2 HELPERS 1 FORK LIFT DRIVER MOVE MUD AND JUNK TUB
	13:30 - 22:00	8.50	DRLPRV	12	C	P		RUN CSG. & INSTALL ROTATING HEAD,WASH DOWN 4 JTS. TAG AT 9,194 NO FILL. LAY DOWN TAG JT. RAN AS FOLLOWS, 94 JTS OF 4.5", 11.6#, L-80, LT&C CASING & 118 JTS OF 4.5", 11.6#, L-80, DQX CASING. TOTAL JTS. 212, 9,200'ft. FLOAT SHOE & FLOAT COLLAR PLACED 1 JT ABOVE SHOE. 17 CENTRALIZERS SPACED @ 15' ABOVE SHOE, TOP OF SECOUND COLLARS, & EVERY 3RD COLLAR TO 7,193' 1 MARKER JOINTS AT 6,863'+ X-OVER AT 5,030, LAND CASING @ 9,194' PU 135K. SO 105K. STRING WT 125K
	13:30 - 22:00	8.50	CSGPRO					RUN PRODUCTION CASING - CASING SIZE 4.500 in, MD TOP: 18.0 usft MD LANDED: 9,213.5 usft
	22:00 - 23:30	1.50	DRLPRV	05	A	P		RIG UP & CIRC.RIG DOWN FRANK'S CASING, RIG UP BJ CEMENT LINES.
	23:30 - 0:00	0.50	DRLPRV	12	D	P		SAFETY MEETING,RIG UP CEMENT HEAD & LINES, TEST LINES 5000 PSI OK.
	3/11/2012	0:00 - 0:30	0.50	CSGPRO	12	B	P	
0:30 - 5:30		4.00	CSGPRO	12	E	P		CEMENT 4.5 CASING.PRESSURE TEST LINES 7000 PSI. PUMP 25 BBLS OF FRESH WATER SPACER MIX AND PUMP LEAD CEMENT 150 Bbls. 375 SKS.@12. PPG YLD 2.26 MIX WATER GPS 12.48. MIX AND PUMP TAIL CEMENT 336 Bbls.1,440,SKS @14.3 PPG. YLD 1.31 MIX WATER GPS 5.9,SHUT DOWN. WASH LINES. DROP TOP PLUG DISPLACE @ 7 BPM W/ 142 Bbls.FRESH WATER + CLAYCARE + 1 GAL. MAGNACIDE. BUMP PLUG TO 3417 PSI HOLD 5 MINS.BLEAD BACK 1.5 Bbls. FLOATS HELD. SLOWED RATE TO 3.5 BPM,CEMENT TO SURFSCE AT 98 Bbls. INTO DISP.TOTAL DISPLACEMENT 143 Bbls. RIG DOWN B J SERVICE. LIFT PRESSURE 2804 PSI. ADD.PL2+6%Gel+5#KOL+0.4%SMS+0.25#CF+0.3% R-3 50:50:2+10%NaCL+0.2%R-3+0.05#SF+0.002FP-6L + CLAYCARE + 1 GAL. MAGNACIDE.
5:30 - 6:30		1.00	CSGPRO	12	B	P		RIG DOWN BJ BAKER HUGHES
6:30 - 9:00		2.50	CSGPRO	14	A	P		SET SLIPS W/ 115K, NIPPLE DOWN ROUGH CUT CSG.
9:00 - 12:00		3.00	CSGPRO	01	E	P		CLEAN PITS, RIG DOWN, RELEASE RIG@ 12:00 NOON. *** WESTROC TRUCKING ON LOCATION @ 09:00 HAUL DRILL PIPE AND MISCELLANEOUS 5 TRUCKS 2 LOWBOYS 3 HALL TRUCKS, 1 FORLIFT, 5 DRIVERS, 4 SWAMPERS, 1 OPERATOR, 2 PUSHER. 3 HRS.

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	LOVE 1121-8L	Wellbore No.	OH
Well Name	LOVE 1121-8L	Wellbore Name	LOVE 1121-8L
Report No.	1	Report Date	3/21/2012
Project	UTAH-UINTAH	Site	LOVE 1121-8L
Rig Name/No.		Event	COMPLETION
Start Date	3/21/2012	End Date	3/30/2012
Spud Date	1/31/2012	Active Datum	RKB @5,592.00usft (above Mean Sea Level)
UWI	NW/SW/0/11/S/21/E/8/0/0/26/PM/S/1 781/NW/0/837/0/0		

1.3 General

Contractor		Job Method	PERFORATE	Supervisor	
Perforated Assembly	PRODUCTION CASING	Conveyed Method	WIRELINE		

1.4 Initial Conditions

Fluid Type	KCL WATER	Fluid Density	
Surface Press		Estimate Res Press	
TVD Fluid Top		Fluid Head	
Hydrostatic Press		Press Difference	
Balance Cond	NEUTRAL		

1.5 Summary

Gross Interval	6,411.0 (usft)-8,652.0 (usft)	Start Date/Time	4/2/2012 12:00AM
No. of Intervals	23	End Date/Time	4/2/2012 12:00AM
Total Shots	138	Net Perforation Interval	45.00 (usft)
Avg Shot Density	3.07 (shot/ft)	Final Surface Pressure	
		Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/Add. Shot	Diameter (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
4/2/2012 12:00AM	WASATCH/			6,411.0	6,413.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N

2.1 Perforated Interval (Continued)

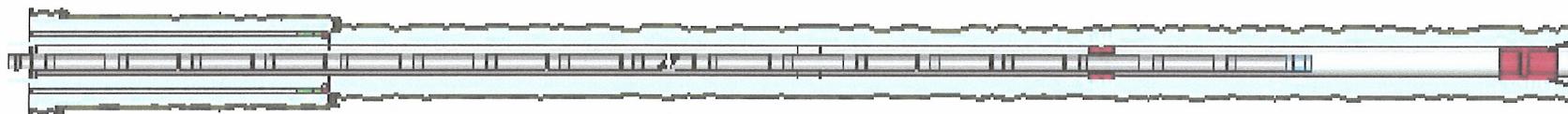
Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
4/2/2012 12:00AM	WASATCH/			6,439.0	6,441.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	WASATCH/			6,539.0	6,541.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	WASATCH/			6,671.0	6,673.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	WASATCH/			6,885.0	6,887.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	WASATCH/			6,915.0	6,917.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	WASATCH/			6,986.0	6,989.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			7,198.0	7,199.0	2.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			7,314.0	7,316.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			7,393.0	7,395.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			7,442.0	7,444.0	4.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			7,572.0	7,574.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			7,610.0	7,612.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			7,646.0	7,648.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			7,705.0	7,707.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			8,070.0	8,071.0	4.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			8,116.0	8,118.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			8,266.0	8,268.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			8,338.0	8,340.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			8,413.0	8,415.0	2.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			8,476.0	8,478.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/2/2012 12:00AM	MESAVERDE/			8,606.0	8,608.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
4/2/2012 12:00AM	MESAVERDE/			8,650.0	8,652.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic



**US ROCKIES REGION
Operation Summary Report**

Well: LOVE 1121-8L		Spud Date: 1/31/2012	
Project: UTAH-UINTAH		Site: LOVE 1121-8L	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 3/21/2012	End Date: 3/30/2012
Active Datum: RKB @5,592.00usft (above Mean Sea Level)		UWI: NW/SW/0/11/S/21/E/8/0/0/26/PM/S/1781/W/0/837/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/21/2012	8:45 - 10:30	1.75	COMP	33		P		HELD SAFETY EETING: HIGH PRESSURE FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 7 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 68 PSI. 1ST PSI TEST T/ 7000 PSI. HELD FOR 30 MIN LOST 71 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. SWM FN HSM, SLIPS, TRIPS & FALLS, RIG MOVE
3/23/2012	7:00 - 7:15	0.25	COMP	48		P		ROAD RIG FROM NBU 920-20B, MIRU, SPOT EQUIP, ND WH, NU BOP, RU FLOOR & TBG EQUIP, READY TO PU TBG ON MONDAY, SWI, SDFWE. HSM, SLIPS, TRIPS & FALLS, P/U TBG
	7:15 - 15:00	7.75	COMP	30	A	P		
3/26/2012	7:00 - 7:15	0.25	COMP	48		P		SPOT TBG TRAILER, INSTAL HAND RAILS ON TRAILER, P/U 3 7/8" BIT, POBS, XN S/N, P/U TBG, REMOVE THREAD PROTECTORS, TALLY & DRIFT L-80 TBG, SURFACE CSG VALVE OPEN & LOCKED, SWI, DRAIN & WINTERIZE EQUIP, SDFN. NOTE: WIND BLOWING APPROX 30 MPH & GUSTING TO APPROX 50 MPH, MAKING IT DIFFICULT TO PU TBG, SHUT DOWN WIND BLOWING TO HARD. HSM, SLIPS, TRIPS & FALLS, PU TBG, TRIPPING
	7:15 - 14:00	6.75	COMP	31	I	P		
3/27/2012	7:00 - 7:15	0.25	COMP	48		P		TALLY & PU TBG, POOH, RD FLOOR & TBG EQUIP, ND BOP, NU FRAC VALVE, P/T & PERF 1ST STAGE IN AM, SWI, SDFN. HSM, SLIPS, TRIPS & FALLS, PRESS TESTING & WIRELINE
	7:15 - 15:00	7.75	COMP	31	I	P		
3/28/2012	7:00 - 7:15	0.25	COMP	48		P		MIRU B & C QUICK TEST, PRESS TEST FRAC VALVE'S, SURFACE CSG VALVE OPEN & LOCKED. FILL SURFACE CSG & 4 1/2" CSG. INSTAL PLUG IN TBG HEAD & PRESS TEST FRAC VALVE'S TO 7,000 PSI FOR 10 MIN, TEST GOOD, NO VISIBLE LEAKS, 4 1/2" CSG HAS ALREADY BEEN TESTED 3/21/2012. NO COMMUNICATION WITH SURFACE CSG, RDMO B & C QUICK TEST. MIRU JW WIRELINE, PERF STG 1) PU 3 1/8 EXP GUN, 23 GRM, .36 HOLE SIZE, 120 & 180 DEG PHASING, RIH PERF AS PER DESIGN, POOH, MIRU SUPERIOR PREP TO FRAC IN AM, DRAIN & WINTERIZE EQUIP, SWI, SDFN.
	7:15 - 16:00	8.75	COMP	33	D	P		
3/29/2012	7:00 - 7:15	0.25	COMP	48		P		HSM, SLIPS, TRIPS & FALLS, FRACING & WIRELINE

**US ROCKIES REGION
Operation Summary Report**

Well: LOVE 1121-8L		Spud Date: 1/31/2012	
Project: UTAH-UINTAH		Site: LOVE 1121-8L	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 3/21/2012	End Date: 3/30/2012
Active Datum: RKB @5,592.00usft (above Mean Sea Level)		UWI: NW/SW/0/11/S/21/E/8/0/0/26/PM/S/1781/W/0/837/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 16:00	8.75	COMP	36	E	P		<p>PRIME UP PUMPS & PRESS TEST LINES TO 9,500 PSI, LOST 50 PSI, NO VISIBLE LEAKS, MANUAL POPOFF SET @ 7,050 PSI, SURFACE CSG VALVE OPEN & LOCKED.</p> <p>FRAC STG 1) WHP 535 PSI, BRK 3,995 PSI @ 3.8 BPM, ISIP 3,003 PSI, FG .79. CALC PERFS OPEN INJ RATE 32.8 BPM @ 6,152 PSI = 16/22 HOLES OPEN 71%. ISIP 3,536 PSI, FG .85, NPI 533 PSI. MP 6,843 PSI, MR 40.1 BPM, AP 6,189 PSI, AR 28.7 BPM, PUMPED 30/50 OTTAWA SAND. SWI, X-OVER FOR WL. (NOTE FORMATION TIGHT))</p> <p>PERF STG 2) PU 4 1/2" 8K HAL CBP & 3 1/8 EXP GUN, 23 GRM, .36 HOLE SIZE. 90 & 120 DEG PHASING, RIH SET 8K CBP @ 8,370' P/U PERF AS PER DESIGN, POOH, X-OVER FOR FRAC CREW.</p> <p>FRAC STG 2) WHP 2,607 PSI, BRK 3,366 PSI @ 3.5 BPM, ISIP 2,669 PSI, FG .76. CALC PERFS OPEN INJ RATE 50.3 BPM @ 5,162 PSI = 22/22 HOLES OPEN 100%. ISIP 2,947 PSI, FG .80, NPI 278 PSI. MP 6,266 PSI, MR 58 BPM, AP 5,174 PSI, AR 51.1 BPM, PUMPED 30/50 OTTAWA SAND. SWI, X-OVER FOR WL.</p> <p>PERF STG 3) PU 4 1/2" 8K HAL CBP & 3 1/8 EXP GUN, 23 GRM, .36 HOLE SIZE. 120 DEG PHASING, RIH SET 8K CBP @ 7,746' P/U PERF AS PER DESIGN, POOH, X-OVER FOR FRAC CREW.</p> <p>FRAC STG 3) WHP 1,249 PSI, BRK 3,107 PSI @ 3.5 BPM, ISIP 2,389 PSI, FG .75. CALC PERFS OPEN INJ RATE 51.8 BPM @ 5,893 PSI = 18/24 HOLES OPEN 75%. ISIP 2,731 PSI, FG .80, NPI 342 PSI. MP 6,826 PSI, MR 52.6 BPM, AP 5,288 PSI, AR 51.9 BPM, PUMPED 30/50 OTTAWA SAND. SWI, X-OVER FOR WL.</p> <p>PERF STG 4) PU 4 1/2" 8K HAL CBP & 3 1/8 EXP GUN, 23 GRM, .36 HOLE SIZE. 90, 120, 180 DEG PHASING, RIH SET 8K CBP @ 7,464' P/U PERF AS PER DESIGN, POOH, X-OVER FOR FRAC CREW.</p> <p>FRAC STG 4) WHP 1,439 PSI, BRK 3,593 PSI @ 3.6 BPM, ISIP 2,475 PSI, FG .78. CALC PERFS OPEN INJ RATE 52.3 BPM @ 5,318 PSI = 21/22 HOLES OPEN 97%. ISIP 2,461 PSI, FG .77, NPI -14 PSI.</p>

**US ROCKIES REGION
Operation Summary Report**

Well: LOVE 1121-8L		Spud Date: 1/31/2012	
Project: UTAH-UINTAH		Site: LOVE 1121-8L	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 3/21/2012	End Date: 3/30/2012
Active Datum: RKB @5,592.00usft (above Mean Sea Level)		UWI: NW/SW/0/11/S/21/E/8/0/0/26/PM/S/1781/W/0/837/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								MP 6,042 PSI, MR 54.8 BPM, AP 4,899 PSI, AR 50.7 BPM, PUMPED 30/50 OTTAWA SAND. SWI, X-OVER FOR WL.
								PERF STG 5) PU 4 1/2" 8K HAL CBP & 3 1/8 EXP GUN, 23 GRM, .36 HOLE SIZE. 90, 120 DEG PHASING, RIH SET 8K CBP @ 7,019' P/U PERF AS PER DESIGN, POOH, X-OVER FOR FRAC CREW.
								FRAC STG 5) WHP 1,114 PSI, BRK 2,783 PSI @ 3.4 BPM, ISIP 1,850 PSI, FG .71. CALC PERFS OPEN INJ RATE 50 BPM @ 4,540 PSI = 21/24 HOLES OPEN 86%. ISIP 2,924 PSI, FG .86, NP1 1,074 PSI. MP 5,563 PSI, MR 51 BPM, AP 4,328 PSI, AR 49.8 BPM, PUMPED 30/50 OTTAWA SAND. SWI, X-OVER FOR WL.
								PERF STG 6) PU 4 1/2" 8K HAL CBP & 3 1/8 EXP GUN, 23 GRM, .36 HOLE SIZE. 120 DEG PHASING, RIH SET 8K CBP @ 6,703' P/U PERF AS PER DESIGN, POOH, X-OVER FOR FRAC CREW.
								FRAC STG 6) WHP 356 PSI, BRK 1,876 PSI @ 3.5 BPM, ISIP 240 PSI, FG .48, ((DID NOT FRAC THIS STAGE FG TO LOW)) SWI, X-OVER FOR WL, ((WELL DEAD DID NOT SET TOP KILL.)) RD SUPERIOR & JW WIRELINE.
								TOTAL SAND = 136,286 LBS TOTAL CLFL = 5,449 BBLS BIOCIDE = 50 GALLONS SCALE = 627 GALLONS
	16:00 - 18:00	2.00	COMP	31	I	P		RD FLOOR, ND FV, NU BOP, RU FLOOR & TBG EQUIP, PU 3 7/8" BIT, POBS, XN S/N, RIH W/ TBG WELL STARTED DISPLACING WATER ON STD # 6 FLUID LEVEL @ 350', SWI, DRAIN & WINTERIZE EQUIP, SDFN.
3/30/2012	7:00 - 7:15	0.25	COMP	48		P		HSM, SLIPS, TRIPS & FALLS, TRIPPING & D/O PLUGS

US ROCKIES REGION
Operation Summary Report

Well: LOVE 1121-8L		Spud Date: 1/31/2012	
Project: UTAH-UJINTAH	Site: LOVE 1121-8L	Rig Name No: GWS 1/1	
Event: COMPLETION	Start Date: 3/21/2012	End Date: 3/30/2012	
Active Datum: RKB @5,592.00usft (above Mean Sea Level)		UWI: NW/SW/0/11/S/21/E/8/0/0/26/PM/S/1781/W/0/837/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 18:00	10.75	COMP	31	I	P		<p>SICP 400 PSI, OPEN WELL, PRESS BLEED RIGHT DOWN NO FLUID, RIH, RIH W/ TBG, RU P/S, FILL TBG BREAK CIRC, NO P/T ON BOP NO KILL PLUG IN HOLE, D/O PLUGS, SURFACE CSG VALVE OPEN & LOCKED.</p> <p>C/O 10' SAND, TAG 1ST PLUG @ 6,691' DRL PLUG IN 11 MIN. 450 PSI INCREASE RIH, CSG PRESS 100 PSI.</p> <p>C/O 30' SAND, TAG 2ND PLUG @ 7,019' DRL PLUG IN 12 MIN. 250 PSI INCREASE RIH, CSG PRESS 50 PSI.</p> <p>C/O 10' SAND, TAG 3RD PLUG @ 7,464' DRL PLUG IN 10 MIN. 400 PSI INCREASE RIH, CSG PRESS 100 PSI.</p> <p>C/O 10' SAND, TAG 4TH PLUG @ 7,746' DRL PLUG IN 11 MIN. 900 PSI INCREASE RIH, CSG PRESS 150 PSI.</p> <p>C/O 20' SAND, TAG 5TH PLUG @ 8,370' DRL PLUG IN 10 MIN. 0 PSI INCREASE RIH ((NO KICK)), CSG PRESS 100 PSI.</p> <p>PBTD @ 9,147', BTM PERF @ 8,652', RIH TO 8,841', NO TAG, 189' PAST BTM PERF W/ 278 JTS 2 3/8" L-80 TBG, LD 25 JTS, PU & STRIP IN TBG HANGER & LAND TBG W/ 253 JTS 2 3/8" L-80, ATTEMPT TO UNSCREW LANDING JT THREADS STARTED TO GAULDED IN HANGER & JT, UNLAND TBG & INSTAL NEW HANGER, EOT 8,045.15'.</p> <p>RD POWER SWIVEL, FLOOR & TBG EQUIP, ND BOPS, NU WH, DROP BALL TO SHEAR OFF BIT W/ 2,600 PSI, LET BIT FALL FOR 20 MIN. P/T FLOWLINE FROM WH TO HAL 9000 TO 3,000 PSI, W/ RIG PUMP, TEST GOOD, NO VISIBLE LEAKS.</p> <p>TURN OVER TO FLOW BACK CREW. RD & ROAD RIG TO NBU 920-14N, SDFWE.</p> <p>KB= 14' 4 1/16" WEATHERFORD HANGER= .83' TBG DELIVERED 314 JTS 253 JTS 2 3/8" L-80 = 8,028.12' TBG USED 253 JTS POBS= 2.20' TBG RETURNED 61 JTS EOT @ 8,045.15' ((1JT W GAULDED THREADS))</p> <p>TWTR= 5,449 BBLS TWR= 1,800 BBLS TWLTR= 3,649 BBLS</p>

US ROCKIES REGION

Operation Summary Report

Well: LOVE 1121-8L		Spud Date: 1/31/2012	
Project: UTAH-UINTAH	Site: LOVE 1121-8L	Rig Name No: GWS 1/1	
Event: COMPLETION	Start Date: 3/21/2012	End Date: 3/30/2012	
Active Datum: RKB @5,592.00usft (above Mean Sea Level)		UWI: NW/SW/0/11/S/21/E/8/0/0/26/PM/S/1781/W/0/837/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/31/2012	-							
4/1/2012	8:15 -		PROD	50				WELL TURNED TO SALES AT 0815 HR ON 4/1/2012 - 650 MCFD, 600 BWPD, FCP 1165#, FTP 250#, 36/64 CK
4/6/2012	7:00 -		PROD	50				WELL IP'D ON 4/6/12 - 1168 MCFD, 40 BOPD, 580 BWPD, CP 1179#, FTP 796#, CK 20/64", LP 118#, 24 HRS

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	LOVE 1121-8L	Wellbore No.	OH
Well Name	LOVE 1121-8L	Common Name	LOVE 1121-8L
Project	UTAH-UINTAH	Site	LOVE 1121-8L
Vertical Section Azimuth	0.00 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	1/31/2012	UWI	NW/SW/0/11/S/21/E/8/0/0/26/PM/S/1781/W/0/83 7/0/0
Active Datum	RKB @5,592.00usft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	WEATHERFORD
Started	2/1/2012	Ended	
Tool Name	MWD	Engineer	Anadarko Employee

2.1.1 Tie On Point

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	E/W (usft)
14.00	0.00	0.00	14.00	0.00	0.00

2.1.2 Survey Stations

Date	Type	MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	TFace (°)
2/1/2012	Tie On	14.00	0.00	0.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2/1/2012	NORMAL	184.00	0.42	266.84	184.00	-0.03	-0.62	-0.03	0.25	0.25	0.00	266.84
	NORMAL	269.00	0.93	320.87	268.99	0.48	-1.37	0.48	0.90	0.60	63.56	80.48
	NORMAL	354.00	1.68	332.45	353.97	2.12	-2.38	2.12	0.93	0.88	13.62	25.22
	NORMAL	444.00	1.81	334.80	443.93	4.58	-3.60	4.58	0.16	0.14	2.61	30.01
	NORMAL	534.00	1.94	332.68	533.88	7.22	-4.90	7.22	0.16	0.14	-2.36	-29.15
	NORMAL	624.00	2.06	335.93	623.83	10.05	-6.26	10.05	0.18	0.13	3.61	45.02
	NORMAL	714.00	2.00	334.80	713.77	12.95	-7.59	12.95	0.08	-0.07	-1.26	-146.86
	NORMAL	804.00	1.94	333.05	803.72	15.73	-8.95	15.73	0.09	-0.07	-1.94	-135.80
	NORMAL	894.00	1.94	325.30	893.66	18.34	-10.50	18.34	0.29	0.00	-8.61	-93.87
	NORMAL	984.00	1.81	320.80	983.62	20.69	-12.27	20.69	0.22	-0.14	-5.00	-133.68
	NORMAL	1,074.00	1.75	311.93	1,073.57	22.71	-14.19	22.71	0.31	-0.07	-9.86	-106.69
	NORMAL	1,164.00	1.83	304.68	1,163.53	24.45	-16.39	24.45	0.27	0.09	-8.06	-74.19
	NORMAL	1,254.00	2.00	311.43	1,253.48	26.30	-18.75	26.30	0.31	0.19	7.50	56.40
	NORMAL	1,344.00	1.94	306.05	1,343.43	28.24	-21.16	28.24	0.22	-0.07	-5.98	-110.65
	NORMAL	1,434.00	1.81	298.55	1,433.38	29.81	-23.64	29.81	0.31	-0.14	-8.33	-121.63
	NORMAL	1,524.00	1.50	310.18	1,523.34	31.25	-25.79	31.25	0.51	-0.34	12.92	138.42
	NORMAL	1,614.00	1.44	318.80	1,613.31	32.86	-27.44	32.86	0.25	-0.07	9.58	109.46

2.1.2 Survey Stations (Continued)

Date	Type	MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	TFace (°)
2/1/2012	NORMAL	1,704.00	1.38	338.55	1,703.28	34.72	-28.58	34.72	0.54	-0.07	21.94	106.84
	NORMAL	1,794.00	1.44	352.05	1,793.26	36.85	-29.13	36.85	0.37	0.07	15.00	86.56
	NORMAL	1,851.00	1.43	348.47	1,850.24	38.26	-29.37	38.26	0.16	-0.02	-6.28	-98.15

2.2 Survey Name: Survey #2

Survey Name	Survey #2	Company	WEATHERFORD
Started	3/5/2012	Ended	
Tool Name	EM	Engineer	Anadarko Employee

2.2.1 Tie On Point

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	E/W (usft)
1,851.00	1.43	348.47	1,850.24	38.26	-29.37

2.2.2 Survey Stations

Date	Type	MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	TFace (°)
3/5/2012	Tie On	1,851.00	1.43	348.47	1,850.24	38.26	-29.37	38.26	0.00	0.00	0.00	0.00
3/5/2012	NORMAL	1,918.00	1.31	321.29	1,917.22	39.68	-30.02	39.68	0.98	-0.18	-40.57	-113.86
	NORMAL	2,013.00	0.98	314.44	2,012.20	41.09	-31.28	41.09	0.38	-0.35	-7.21	-160.87
	NORMAL	2,108.00	0.96	307.79	2,107.19	42.15	-32.49	42.15	0.12	-0.02	-7.00	-103.39
	NORMAL	2,203.00	0.63	287.67	2,202.18	42.79	-33.61	42.79	0.45	-0.35	-21.18	-149.54
	NORMAL	2,299.00	0.44	289.17	2,298.18	43.08	-34.46	43.08	0.20	-0.20	1.56	176.53
	NORMAL	2,394.00	0.25	289.67	2,393.17	43.27	-35.00	43.27	0.20	-0.20	0.53	179.34
	NORMAL	2,489.00	1.31	103.17	2,488.17	43.09	-34.14	43.09	1.64	1.12	182.63	174.54
	NORMAL	2,585.00	1.56	97.67	2,584.14	42.66	-31.78	42.66	0.30	0.26	-5.73	-31.62
	NORMAL	2,680.00	1.31	98.04	2,679.11	42.34	-29.42	42.34	0.26	-0.26	0.39	178.06
	NORMAL	2,775.00	1.00	148.79	2,774.09	41.48	-27.92	41.48	1.08	-0.33	53.42	131.17
	NORMAL	2,871.00	1.00	163.17	2,870.07	39.96	-27.24	39.96	0.26	0.00	14.98	97.19
	NORMAL	2,966.00	1.06	153.67	2,965.06	38.38	-26.61	38.38	0.19	0.06	-10.00	-75.43
	NORMAL	3,062.00	1.13	148.42	3,061.04	36.78	-25.72	36.78	0.13	0.07	-5.47	-57.74
	NORMAL	3,157.00	1.19	159.29	3,156.02	35.06	-24.88	35.06	0.24	0.06	11.44	80.23
	NORMAL	3,253.00	1.31	157.42	3,252.00	33.11	-24.11	33.11	0.13	0.13	-1.95	-19.71
	NORMAL	3,348.00	1.19	154.17	3,346.98	31.22	-23.26	31.22	0.15	-0.13	-3.42	-151.04
	NORMAL	3,443.00	1.25	164.04	3,441.96	29.33	-22.54	29.33	0.23	0.06	10.39	79.04
	NORMAL	3,538.00	1.38	163.04	3,536.93	27.24	-21.93	27.24	0.14	0.14	-1.05	-10.51
	NORMAL	3,634.00	1.44	165.04	3,632.90	24.97	-21.28	24.97	0.08	0.06	2.08	40.36
	NORMAL	3,729.00	1.44	161.04	3,727.87	22.69	-20.58	22.69	0.11	0.00	-4.21	-92.00
	NORMAL	3,824.00	1.38	165.17	3,822.84	20.46	-19.90	20.46	0.12	-0.06	4.35	122.61
	NORMAL	3,920.00	1.59	167.49	3,918.81	18.04	-19.32	18.04	0.23	0.22	2.42	17.14
	NORMAL	4,016.00	1.63	171.04	4,014.77	15.39	-18.82	15.39	0.11	0.04	3.70	69.93
	NORMAL	4,111.00	1.56	170.29	4,109.74	12.78	-18.39	12.78	0.08	-0.07	-0.79	-163.77
	NORMAL	4,206.00	1.56	172.42	4,204.70	10.22	-18.00	10.22	0.00	0.00	0.00	0.00
	NORMAL	4,302.00	1.38	129.42	4,300.67	8.19	-16.93	8.19	1.14	-0.19	-44.79	-120.33
	NORMAL	4,398.00	1.19	127.67	4,396.65	6.85	-15.25	6.85	0.20	-0.20	-1.82	-169.20
	NORMAL	4,493.00	1.25	126.29	4,491.63	5.64	-13.63	5.64	0.07	0.06	-1.45	-26.78
	NORMAL	4,587.00	1.06	136.92	4,585.61	4.39	-12.21	4.39	0.00	0.00	0.00	0.00
	NORMAL	4,683.00	1.25	137.79	4,681.59	2.97	-10.90	2.97	0.20	0.20	0.91	5.71
	NORMAL	4,779.00	1.31	145.04	4,777.56	1.29	-9.57	1.29	0.00	0.00	0.00	0.00
	NORMAL	4,874.00	1.63	147.54	4,872.53	-0.74	-8.22	-0.74	0.00	0.00	0.00	0.00
	NORMAL	4,969.00	1.75	146.42	4,967.49	-3.08	-6.70	-3.08	0.13	0.13	-1.18	-15.95

2.2.2 Survey Stations (Continued)

Date	Type	MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	TFace (°)
3/5/2012	NORMAL	5,064.00	1.44	135.67	5,062.45	-5.15	-5.06	-5.15	0.45	-0.33	-11.32	-141.30
	NORMAL	5,159.00	1.38	132.79	5,157.43	-6.78	-3.39	-6.78	0.10	-0.06	-3.03	-131.69
	NORMAL	5,255.00	1.19	94.04	5,253.40	-7.63	-1.54	-7.63	0.91	-0.20	-40.36	-121.24
3/6/2012	NORMAL	4,206.00	1.56	172.42	4,204.70	10.22	-18.00	10.22	0.06	0.00	2.24	91.06
	NORMAL	4,302.00	1.38	129.42	4,300.67	8.19	-16.93	8.19	0.00	0.00	0.00	0.00
	NORMAL	4,398.00	1.19	127.67	4,396.65	6.85	-15.25	6.85	0.00	0.00	0.00	0.00
	NORMAL	4,493.00	1.25	126.29	4,491.63	5.64	-13.63	5.64	0.00	0.00	0.00	0.00
	NORMAL	4,587.00	1.06	136.92	4,585.61	4.39	-12.21	4.39	0.30	-0.20	11.31	136.80
	NORMAL	4,683.00	1.25	137.79	4,681.59	2.97	-10.90	2.97	0.00	0.00	0.00	0.00
	NORMAL	4,779.00	1.31	145.04	4,777.56	1.29	-9.57	1.29	0.18	0.06	7.55	73.32
	NORMAL	4,874.00	1.63	147.54	4,872.53	-0.74	-8.22	-0.74	0.34	0.34	2.63	12.58
	NORMAL	4,969.00	1.75	146.42	4,967.49	-3.08	-6.70	-3.08	0.00	0.00	0.00	0.00
	NORMAL	5,064.00	1.44	135.67	5,062.45	-5.15	-5.06	-5.15	0.00	0.00	0.00	0.00
	NORMAL	5,159.00	1.38	132.79	5,157.43	-6.78	-3.39	-6.78	0.00	0.00	0.00	0.00
	NORMAL	5,255.00	1.19	94.04	5,253.40	-7.63	-1.54	-7.63	0.00	0.00	0.00	0.00
	NORMAL	5,349.00	0.50	117.54	5,347.39	-7.89	-0.21	-7.89	0.81	-0.73	25.00	164.75
	NORMAL	5,445.00	0.13	299.29	5,443.39	-8.03	0.07	-8.03	0.66	-0.39	-185.68	-179.64
	NORMAL	5,539.00	1.06	303.17	5,537.39	-7.50	-0.75	-7.50	0.99	0.99	4.13	4.42
	NORMAL	5,634.00	2.19	331.79	5,632.35	-5.42	-2.34	-5.42	1.43	1.19	30.13	50.57
	NORMAL	5,730.00	2.25	339.92	5,728.28	-2.04	-3.86	-2.04	0.33	0.06	8.47	83.29
	NORMAL	5,826.00	2.00	339.54	5,824.21	1.30	-5.09	1.30	0.26	-0.26	-0.40	-176.96
	NORMAL	5,921.00	1.81	331.67	5,919.16	4.18	-6.38	4.18	0.34	-0.20	-8.28	-129.88
	NORMAL	6,017.00	1.38	335.79	6,015.12	6.56	-7.58	6.56	0.46	-0.45	4.29	167.12
NORMAL	6,112.00	1.44	336.67	6,110.09	8.70	-8.52	8.70	0.07	0.06	0.93	20.28	
NORMAL	6,207.00	1.13	340.04	6,205.07	10.68	-9.31	10.68	0.34	-0.33	3.55	167.98	
NORMAL	6,303.00	1.12	339.43	6,301.05	12.45	-9.96	12.45	0.02	-0.01	-0.64	-130.17	
NORMAL	6,398.00	0.69	328.92	6,396.04	13.81	-10.59	13.81	0.48	-0.45	-11.06	-164.09	
NORMAL	6,493.00	0.56	337.04	6,491.03	14.73	-11.06	14.73	0.17	-0.14	8.55	149.75	
NORMAL	6,589.00	0.56	324.04	6,587.03	15.54	-11.52	15.54	0.13	0.00	-13.54	-96.50	
NORMAL	6,684.00	0.31	326.04	6,682.02	16.13	-11.94	16.13	0.26	-0.26	2.11	177.52	
NORMAL	6,780.00	0.19	296.17	6,778.02	16.41	-12.22	16.41	0.18	-0.13	-31.11	-146.92	
3/7/2012	NORMAL	6,875.00	0.25	222.67	6,873.02	16.33	-12.51	16.33	0.28	0.06	-77.37	-116.40
	NORMAL	6,971.00	0.06	241.17	6,969.02	16.15	-12.69	16.15	0.20	-0.20	19.27	174.37
	NORMAL	7,066.00	0.38	123.67	7,064.02	15.95	-12.47	15.95	0.43	0.34	-123.68	-124.94
	NORMAL	7,161.00	0.56	128.04	7,159.02	15.49	-11.85	15.49	0.19	0.19	4.60	13.45
	NORMAL	7,256.00	0.81	133.04	7,254.01	14.75	-10.99	14.75	0.27	0.26	5.26	15.96
	NORMAL	7,352.00	1.06	135.79	7,350.00	13.65	-9.87	13.65	0.26	0.26	2.86	11.55
	NORMAL	7,448.00	0.94	151.29	7,445.98	12.32	-8.88	12.32	0.31	-0.13	16.15	121.54
	NORMAL	7,543.00	0.31	256.04	7,540.98	11.57	-8.75	11.57	1.12	-0.66	110.26	163.60
	NORMAL	7,637.00	1.00	278.79	7,634.97	11.64	-9.81	11.64	0.77	0.73	24.20	32.28
	NORMAL	7,732.00	1.19	260.79	7,729.96	11.61	-11.60	11.61	0.41	0.20	-18.95	-70.28
	NORMAL	7,828.00	1.13	228.29	7,825.94	10.82	-13.29	10.82	0.68	-0.06	-33.85	-111.32
	NORMAL	7,923.00	0.56	274.17	7,920.93	10.23	-14.45	10.23	0.89	-0.60	48.29	151.49
	NORMAL	8,017.00	0.69	259.29	8,014.92	10.16	-15.47	10.16	0.22	0.14	-15.83	-58.91
	NORMAL	8,113.00	0.69	216.04	8,110.91	9.58	-16.38	9.58	0.53	0.00	-45.05	-111.62
	NORMAL	8,206.00	0.88	185.16	8,203.91	8.42	-16.77	8.42	0.49	0.20	-33.20	-81.78
NORMAL	8,302.00	1.13	165.42	8,299.89	6.77	-16.60	6.77	0.44	0.26	-20.56	-64.31	
NORMAL	8,397.00	1.31	172.29	8,394.87	4.78	-16.22	4.78	0.24	0.19	7.23	42.57	
NORMAL	8,492.00	1.56	163.92	8,489.84	2.47	-15.71	2.47	0.34	0.26	-8.81	-44.21	
3/8/2012	NORMAL	8,587.00	1.44	162.42	8,584.81	0.09	-14.99	0.09	0.13	-0.13	-1.58	-162.63
	NORMAL	8,682.00	1.69	156.29	8,679.77	-2.34	-14.07	-2.34	0.32	0.26	-6.45	-36.90
	NORMAL	8,777.00	2.00	147.66	8,774.72	-5.02	-12.62	-5.02	0.44	0.33	-9.08	-46.24
	NORMAL	8,872.00	2.38	150.42	8,869.65	-8.13	-10.76	-8.13	0.42	0.40	2.91	16.89
	NORMAL	8,968.00	2.69	147.54	8,965.56	-11.77	-8.57	-11.77	0.35	0.32	-3.00	-23.78
NORMAL	9,063.00	3.00	148.79	9,060.44	-15.78	-6.08	-15.78	0.33	0.33	1.32	11.94	

2.2.2 Survey Stations (Continued)

Date	Type	MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	TFace (°)
3/8/2012	NORMAL	9,134.00	3.01	152.05	9,131.35	-19.01	-4.25	-19.01	0.24	0.01	4.59	88.28
	NORMAL	9,194.00	3.01	152.05	9,191.26	-21.79	-2.77	-21.79	0.00	0.00	0.00	0.00