RECEIVED

Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR

JUL 09 2013

FORM APPROVED OMB No. 1004-0137

•	BUREAU OF LAND MA	NAGEM	ENT		Expires:	July 31, 2010
			Farmin	aton F	5 Lease Serial No.	078578-A
0110	IDRY NOTICES AND REP					-07 858 7-A-
Suit Do not us	NDRY NOTICES AND REP	UR IS OI	N WELLS		6. If Indian, Allottee or Tribe	Name
	e this form for proposals well. Use Form 3160-3 (A					
	IBMIT IN TRIPLICATE - Other ins				7. If Unit of CA/Agreement, 1	Jama and/ar No
1. Type of Well	DINIT IN TRIPEICATE - Other inc	structions o	ii page z.		7. If Only of CATAgreement, I	value and/or ivo.
	X Gas Well Other				8. Well Name and No.	
						lowell K 1
2. Name of Operator					9. API Well No.	
	ton Resources Oil & Gas			- 1->		045-09313
3a. Address PO Box 4289, Farmingto	on NM 87499	1	No. (include area o (505) 326-970		10. Field and Pool or Explora	tory Area
4. Location of Well (Footage, Sec., T., i			(000) 020 070		11. Country or Parish, State	
	E), 1750' FSL & 1650' FWL	., Sec. 21	I, T30N, R8W		San Juan	, New Mexico
			·			
12. CHECK	THE APPROPRIATE BOX(ES) TO INDI	CATE NATURE	OF NO	TICE, REPORT OR OTH	ER DATA
TYPE OF SUBMISSION			TYPE	OF AC	TION	
X Notice of Intent	Acidize §	Doc-			roduction (Start/Resume)	Water Shut-Off
Notice of intelli	Alter Casing	Deep	en ire Treat	===	teclamation	Well Integrity
Subsequent Report	Casing Repair	=	Construction	===	Lecomplete	X Other Drill
	Change Plans	=	and Abandon	===	emporarily Abandon	Monitor Wells
Final Abandonment Notice	Convert to Injection	Plug		-	Vater Disposal	Withitter Wells
13. Describe Proposed or Completed O	<u> </u>	<u> </u>				moto división thoras
Burlington Resources (the attached State of No sign the application as	I Abandonment Notices must be filed or final inspection.) Dil & Gas Company LP recew Mexico Office of the Sapint applicant since the distory & proposed plan	quests p tate Eng e locatio	ermission to ineer applica n is on BLM s	drill a n tion. Bu surface.	nonitoring well for the	e subject location per
						DAID 111 10110
						RCVD JUL 19'13
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OLO Accepted	I For Record	A CONTRACTOR	e attach: Mons of	ardini Ardini	74.431	DIST. 3
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14. I hereby certify that the foregoing i	is true and correct. Name (Printed/T) enny Davis	ped)			Staff Regulatory Te	echnician
	(1)		Title		otali regulatory re	,0111101011
					0/08/00/	
Signatura Kent			Date		6/27/2013	3
Signature	TI112 024 67 7	OD 5555		TE OF		
<u> </u>	THIS SPACE F	UR FEDE	ERAL OR STA	IE OFF	-ICE USE	· · · · · · · · · · · · · · · · · · ·
Approved by				() .	211.
Conditions of approval if any archite	Approval of this nation does no	o t warrant or	certify	Title	1et-rog	Date 8

(Instruction on page 2)

that the applicant holds legal or equitable tile to those rights in the subject lease which would

false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

Office

Howell K 1 NOI Attachment

Environmental investigation began in August 2005 when hydrocarbon impacted soils were discovered during below grade tank removal activities in an area SW of the Howell K No. 1 wellhead. Subsequently, an excavation was dug of approximately 70 x 50 x 36 feet deep, at which point activities were halted for safety reasons. Groundwater was encountered at approximately 34 feet bgs, however, the vertical extent of hydrocarbon impacts had not been delineated.

Monitor Well MW-1 was installed during March 2006, and monitor wells MW-2, MW-3, and MW-4 were installed during August 2008 in response to a request from the NMOCD for additional site characterization and enhanced laboratory analyses. From 2008 through 2010, All site monitor wells were sampled and groundwater was analyzed for dissolved iron, dissolved manganese, sulfate, fluoride, and for benzene, toluene, ethylbenzene and xylenes (BTEX). BTEX analysis was discontinued after December 2010, as eight consecutive quarters of BTEX constituents being under regulatory levels had been reached. Site wells are sampled annually during September for dissolved iron, dissolved manganese, sulfate and fluoride.

Monitor wells MW-1 will be plugged (see P&A Plan) and MW-1R drilled immediately east.

- 1) This well is being installed solely to monitor groundwater; they will not be used for any exploratory purposes.
- 2) Monitor well is being installed due to New Mexico Oil Conservation Division (NMOCD) request for further monitoring Ground water in the area. Monitoring will continue until all constituents of concern are below regulatory standards for Eight consecutive quarters, appear stable, or reach regional background levels.
- 3) Once site closure has been obtained, a copy of no further action (NFA) notice will be provided to the BLM.
- 4) Once NFA has been reached, monitor wells will be plugged and abandoned in accordance with New Mexico Office Of the State Engineer (NMOSE) regulations.

New monitor well will be completed with an HAS Drill Rig constructed of 2" PVC casing with a stick up surface completion. Monitor wells will have a minimum of 15 feet of 0.010 screen with a 10/20 sand pack. A bentonite seal will be placed above the sand pack and the annulus grouted to the surface.

File No.		

NEW MEXICO OFFICE OF THE STATE ENGINEER



APPLICATION FOR PERMIT TO DRILL A WELL WITH NO CONSUMPTIVE USE OF WATER



(check applicable box):

	For fees, see State Engineer web	site: http://www.ose.state	e.nm.us/	
Purpose:	☐ Pollution Control And / Or Recovery	☐ Geo-Thermal		
☐ Exploratory	☐ Construction Site De-Watering	Other (Descri	be):	
│	☐ Mineral De-Watering			
A separate permit will	be required to apply water to beneficial use.			
☐ Temporary Reques	st - Requested Start Date:	Reque	ested End Date:	
Plugging Plan of Oper	rations Submitted? X Yes No			
		NAME.	And the second s	
1. APPLICANT(S)				
Name: CRA for Cond	ocoPhillips Company	Name: Bureau Of L	and Management	
Contact or Agent: Kelly Blanchard	check here if Agent 🛚	Contact or Agent: Jim Lovato	check here if Agent	
Mailing Address: 6121 Indian School Rd NE, Suite 200		Mailing Address: PO Box 4289		
City: Albuquerque		City: Farmington		
State: NM	Zip Code: 87110	State: NM	Zip Code: 87499	
Phone: (505) 975-2563 ☐ Home ☑ Cell Phone (Work): (505) 884-0672		Phone: Phone (Work): 505-	☐ Home ☐ Cell 564-7735	
E-mail (optional): keb	lanchard@craworld.com	E-mail (optional): jlovato@blm.gov		
	FOR OSE INTERN	AL USE	Application for Permit, Form wr-07, Rev 4/12/12	
	File Number:	. Trn Number:		
	Trans Description (optional):		
	Sub-Basin:			

PCW/LOG Due Date:

WELL(S) Describe the well(s)			ate Plane (NAD 83), UTM (NAD 83), <u>or</u> Latitude/Longitude		
.at/Long - WGS84).			a PLSS location in addition to above.		
NM State Plane (NAD83) NM West Zone NM East Zone NM Central Zone		JTM (NAD83) (Meter]Zone 12N]Zone 13N	s) \(\times \tat/Long \text{ (WGS84) (to the nearest 1/10 th of second)}		
Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name		
/IW-1R	-107, 41' 05.80"	36, 47' 40.27"			
NOTE: If more well location Additional well description			WR-08 (Attachment 1 – POD Descriptions) If yes, how many 1		
Other description relating wel	ll to common landmar	rks, streets, or other:	Nearest intersection is NM173 and NM 511		
Well is on land owned by: BL	.M				
	more than one (1) w	ell needs to be desc	cribed, provide attachment. Attached? 🛚 Yes 🔲 No		
If yes, how many 1	- 40.00		utside diameter of well casing (inches): 2.00		
Approximate depth of well (fe Driller Name: National EWP	eet): 40.00		Driller License Number: WD 1210		
ADDITIONAL STATEMENT lonitor Wells MW-1 Installa nmediately east.			will be plugged (see P&A plan) and MW-1R drilled		
		FOR OSE INTERNAL	JSE Application for Permit, Form w		

File Number:

Trn Number:

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application: Mine De-Watering: Pollution Control and/or Recovery: Construction Exploratory: ☐ Include a Include a plan for pollution De-Watering: Include a plan for pollution ☐ Include a description of the control/recovery, that includes the following: description of control/recovery, that includes the proposed dewatering any proposed A description of the need for mine following: A description of the need for the operation. pump test, if dewatering. pollution control or recovery operation. The estimated duration of applicable. ☐ The estimated maximum period of time The estimated maximum period of the operation, for completion of the operation. time for completion of the operation. ☐ The maximum amount of ☐ The source(s) of the water to be diverted. ☐ The annual diversion amount. ☐ The annual consumptive use water to be diverted. ☐The geohydrologic characteristics of the A description of the need aquifer(s). ☐The maximum amount of water to be amount. for the dewatering operation, ☐ The maximum amount of water to be diverted per annum. and, A description of how the diverted and injected for the duration of The maximum amount of water to be the operation. diverted water will be disposed diverted for the duration of the operation. ☐ The method and place of discharge.☐ The method of measurement of The quality of the water. of. Monitoring: Geo-Thermal: The method of measurement of water Include the water produced and discharged. Include a description of the diverted. ☐ The source of water to be injected. ☐The recharge of water to the aquifer. reason for the geothermal heat exchange The method of measurement of monitoring project. Description of the estimated area of well, and, water injected. ☐ The amount of water to be hydrologic effect of the project. ☐ The characteristics of the aquifer. ☐The method and place of discharge. ☐An estimation of the effects on surface diverted and re-injected for the duration The method of determining the project, resulting annual consumptive use of water rights and underground water rights of the planned ☐ The time frame for water and depletion from any related constructing the geothermal from the mine dewatering project. monitoring. A description of the methods employed to stream system. heat exchange project, and, Proof of any permit required from the ☐ The duration of the project. estimate effects on surface water rights and Preliminary surveys, design New Mexico Environment Department. underground water rights. ☐ An access agreement if the data, and additional ☐ Information on existing wells, rivers. applicant is not the owner of the land on information shall be included to springs, and wetlands within the area of which the pollution plume control or provide all essential facts hydrologic effect. recovery well is to be located. relating to the request. **ACKNOWLEDGEMENT** Jim Lovato I, We (name of applicant(s)), Kelly Blanchard Print Name(s) affirm that the foregoing statements are true to the best of (my, our) knowledge and belief. Old Led Vanhand Applicant Signature **ACTION OF THE STATE ENGINEER** This application is: approved partially approved ☐ denied provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval. Witness my hand and seal this _____ day of _____ 20 ____ , for the State Engineer, , State Engineer Print Signature Title: Print Application for Permit, Form wr-07 FOR OSE INTERNAL USE File Number: Trn Number:



NEW MEXICO OFFICE OF THE STATE ENGINEER



ATTACHMENT 1 POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

a. Is this a:		b. Information on Attachment(s):			
Move-From Point of Diversion(s)			Number of points of diversion involved in the application: $\underline{3}$		
☐ Move-To Point of Divers	sion(s)	Total number of pages attached to the application: 1			
Surface Point of Diversion	OR 🛛 W	ell			
Name of ditch, acequia,	or spring:				
Stream or water course:					
Tributary of:					
c. Location (Required): Required: Move to POD (ocation)	coordinate must be eith	er New Me	xico State Pla	ane (NAD 83), UTM (NAD 83), <u>or</u> Lat/Long (WGS84)	
NM State Plane (NAD83)	UTM (NAD83)			OTHER (allowable only for move-from	
(feet)	(meters)	Lat	/J_pna-	descriptions - see application form for format) PLSS (quarters, section, township, range)	
NM West Zone	Zone 13N 🔲	WGS	84)	☐ Hydrographic Survey, Map & Tract	
NM Central Zone ☐ NM East Zone ☐	Zone 12N 🔲	1/10 th 6	of second	Lot, Block & Subdivision	
	V 1 ' 1 graps	Proces	V	Grant	
POD Number: MW-1R	X or Longitude SEE PR	EVIOUS	Y. or	Other Location Description:	
	Latitude				
POD Number: IVIVV-5	X or Longitude SEE P	REVIOUS	Y or	Other Location Description:	
	Latitude				
POD Number: WW-6	X or Longitude SEE P	REVIOUS	Y or	Other Location Description:	
i ob italiasoj. mvi o	Latitude			o the beatier beating the	
POD Number:	X or Longitude	Y or La	titude	Other Location Description:	
POD Number:	X or Longitude	Y or La	titude	Other Location Description:	
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POD Number:	X or Longitude	Y or La	titude	Other Location Description:	
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POD Number:	X or Longitude	Y or La	ititude	Other Location Description:	
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DOD M	X or Longitude	Y or La	ditudo	Other Leasting Description	
POD Number:	A of Longitude	i Oi La	muut	Other Location Description:	

FOR OSE INTERNAL USE	Form wr-08 POD DESCRIPTIONS - ATTACHMENT 1
File Number:	Trn Number:
Trans Description (optional):	

TABLE 1

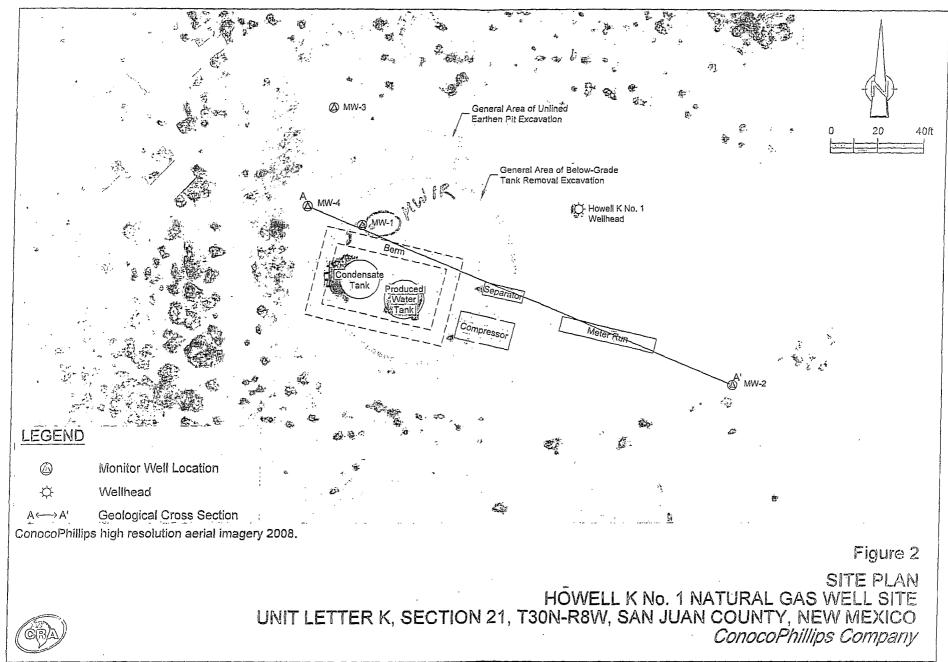
SITE HISTORY TIMELINE CONOCOPHILLIPS COMPANY SAN JUAN COUNTY, NEW MEXICO HOWELL K NO. 1

Date/Time Period	Event/Action	Description/Comments
July 26, through August 18, 2005	Initial Site assessment	Environmental investigation began with the excavation of approximately 4000 cubic yards of impacted soil from an area southwest of the Howell K No.1 well head. Impacted soils were discovered during the removal activities of a below grade tank. Dimensions of the excavation were approximately 70 feet long by 50 feet wide by 36 feet deep. Groundwater was encountered at approximately 34 feet and soils were still impacted at 36 feet deep, the point at which excavation machinery was stopped at the practical limit for safe operation. The total vertical extent of hydrocarbon impacts were not completely delineated. Soil was treated with 600 total gallons of potassium permanganate solution. The excavation area was backfilled with clean soil.
March 10, 2006	Groundwater monitor well installation	One ground water monitor well, MW-1, was installed in the center of the backfilled excavation by Envirotech.
March 31, 2006	Site transfer	ConocoPhillips Company completed acquisition of Burlington Resources.
March and June 2007	Groundwater monitoring not performed	After the acquisition of Burlington Resources by ConocoPhillips, consulting responsibilities were transferred from Lode Star LLC of Farmington New Mexico to Tetra Tech of Albuquerque. Due to the transition, first and second quarter sampling of 2007 was not performed.
November 9, 2007 through March 19, 2008	Groundwater monitoring	Tetra Tech began sampling the Howell K No. 1 site quarterly in November 2007. Groundwater was sampled from MW-1 and was analyzed for BTEX constituents. No constituents were detected at levels that exceeded the NMWQCC standards.
April 1, 2008	Additional monitoring requested by OCD	Oil Conservation Division of NM Energy, Minerals, and Resources Depindicates additional investigation and sampling is necessary for closur consideration during a meeting with Glenn Von Gonten.
July 23, 2008	Groundwater monitoring postponed	Groundwater monitoring of MW-1 was postponed after it was found that there was an obstruction caused by settling and shifting of the MW-1 casing. It was determined that the obstruction could be avoided by using a smaller bailer to collect samples. Sampling was postponed and was set to follow upcoming monitor well installation so that proper sampling materials could be used.
August 13 and 14, 2008	Groundwater monitor well installation and groundwater monitoring	Three additional groundwater monitor wells (MW-2, MW-3 and MW-4) weinstalled by WDC and overseen by Tetra Tech. MW-2 was installed upgradient of MW-1. Both MW-3 and MW-4 were installed downgradient of MW-1. All wells were developed by purging approximately 80 gallons of water using a surge block and a purge pump. A sample was collected from MW-1 on August 14th. A 1/2-inch disposable bailer was used to avoid an obstruction in MW-1. The sample was analyzed for BTEX constituents. All constituents were below NMWQCC standards.
October 24, 2008	Groundwater monitoring	Third quarter 2008 groundwater monitoring was completed and was the fir quarter of sampling to include all four monitor wells on site. A baseline su was completed including major ions, total metals, semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs) including BTEX, diesel range organics, and gasoline range organics. All BTEX constituents were below NMWQCC standards. All four wells were above the standard sulfate.
January 30, 2009	4th quarter 2008 groundwater monitoring	Tetra Tech conducted fourth quarter 2008 groundwater monitoring at the sfor BTEX constituents in all four monitor wells. All wells were below NMWQCC standards for BTEX.
September 25,2009	2009 annual 9 groundwater monitoring	Tetra Tech conducted 2009 annual groundwater monitoring of MW-2, MW and MW-4 for BTEX, dissoved iron, dissolved manganese, sulfate, and fluoride. All three wells were below NMWQCC standards for BTEX. All th wells were above standard for sulfate. Dissolved manganese was above standard in MW-3 and MW-4 and flouride was above standard in MW-4. Dissolved metals analyses conducted for the first time since standards are based on dissolved metals testing. OCD concurred, allowing total metals testing to be discontinued.

TABLE 1

SITE HISTORY TIMELINE CONOCOPHILLIPS COMPANY SAN JUAN COUNTY, NEW MEXICO HOWELL K NO. 1

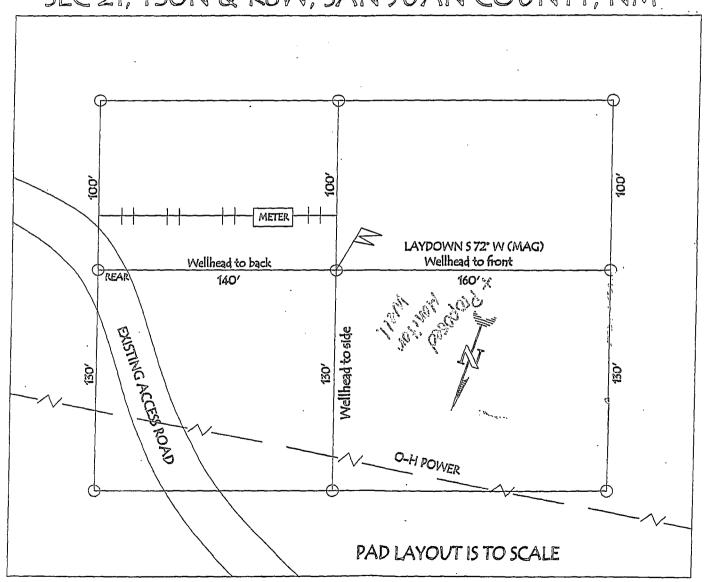
Date/Time Period	Event/Action	Description/Comments
October 18, 2009	Groundwater monitoring	Tetra Tech conducted 2009 annual groundwater monitoring of MW-1 for BTEX, dissoved iron, dissolved manganese, sulfate, and fluoride. MW-1 was below NMWQCC standards for BTEX. Sulfate, dissolved manganese and dissolved iron were above standard in MW-1.
December 15, 2010	Groundwater monitoring	Tetra Tech conducted quarterly groundwater monitoring at the site for BTEX, dissolved iron, dissolved manganese, sulfate and flouride. All four monitor wells are below NMWQCC standards for BTEX. All four monitor wells were above the standard for sulfate. MW-1, MW-3 and MW-4 were above standard for dissolved manganese and MW-1 and MW-3 were also above the standard for dissolved iron.
March 30, 2010	Groundwater monitoring	Tetra Tech conducted quarterly groundwater monitoring at the site for BTEX, dissolved iron, dissolved manganese, and sulfate. All four monitor wells were below NMWQCC standards for BTEX. All four monitor wells were above the standard for sulfate. MW-1, MW-3 and MW-4 were also above the standard for dissolved manganese.
June 8, 2010	Groundwater monitoring	Tetra Tech conducted quarterly groundwater monitoring at the site for BTEX, dissolved iron, dissolved manganese, and sulfate. All four monitor wells were below NMWQCC standards for BTEX. All four monitor wells were above the standard for sulfate. MW-1, MW-3 and MW-4 were above the standard for dissolved manganese. MW-1 was also above the standard for dissolved iron.
September 23,2010	Groundwater monitoring	Tetra Tech conducted quarterly groundwater monitoring at the site for BTEX, dissolved iron, dissolved manganese, fluoride and sulfate. All four monitor wells were below NMWQCC standards for BTEX. All four monitor wells were above the standard for sulfate. MW-1, MW-3 and MW-4 were above the standard for dissolved manganese. MW-1 was also above standard for dissolved iron.
December 15,2010	Groundwater monitoring	Tetra Tech conducted quarterly groundwater monitoring at the site for BTEX, dissolved iron, dissolved manganese, fluoride and sulfate. MW-3 was observed to be dry during this monitoring event, which was likely due to an interface probe malfunction. MW-1, MW-2 and MW-4 were sampled. All three sampled monitor wells are below NMWQCC standards for BTEX. MW-1 and MW-4 were above the the standards for sulfate, dissolved manganese, and dissolved iron. Monitor well MW-4 was also found to be above the the standard for fluoride.
March 15, 2011	Groundwater monitoring	First quarter of groundwater monitoring with BTEX analysis discontinued; MW-1, MW-2, MW-3, and MW-4 were sampled and analyzed for dissolved iron, dissolved manganese, fluoride and sulfate.
June 15, 2011	Transfer of site consulting responsibilities	On June 15, 2011, site consulting responsibilities were transferred from Tetra Tech of Albuquerque, NM to Conestoga-Rovers & Associates (CRA) of Albuquerque, NM.
June 23, 2011	Groundwater monitoring	Second quarter of groundwater monitoring with BTEX analysis discontinued; MW-1, MW-2, MW-3, and MW-4 were sampled and analyzed for dissolved iron, dissolved manganese, fluoride and sulfate.
October 11 and 12, 2011	Groundwater monitoring	Third quarter of groundwater monitoring with BTEX analysis discontinued; MW-1, MW-2, MW-3, and MW-4 were sampled and analyzed for dissolved iron, dissolved manganese, fluoride and sulfate.
October 3, 2012	Groundwater monitoring	MW-1, MW-2, MW-3, and MW-4 were sampled and analyzed for dissolved iron, dissolved manganese, fluoride and sulfate.



074928-95(004)GN-DL001_SD NOV 01/2012

API# 3004509313

BURLINGTON RESOURCES OIL & GAS COMPANY LP HOWELL K #1 1750' FSL & 1650' FWL, ELEV. 5778 SEC 21, T30N & R8W, SAN JUAN COUNTY, NM



Conditions of Approval

Operator:

Burlington Resources Oil & Gas Company LP

Well Name:

Howell K #1

Legal Location:

1750' FSL, 1650' FWL, Section 21, T 30 N, R 8 W

Lease Number:

NMSF 078587-A

The following conditions of approval will apply to Burlington Resources Oil & Gas Company LP, Howell K #1 existing well pad, unless a particular Surface Managing Agency or private surface owner has supplied to Bureau of Land Management and the operator a contradictory environmental stipulation. The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.1 or 3163.2.

Site Specific Stipulations

Operational Approval: This approval is for the temporary use of a 60' x 100' off the NW end of the Howell K #1well pad existing well pad. This operational approval allows for a temporary use area to Dill a Monitoring well on the Howell K #1 well pad. Any additional use of the Howell K #1 well pad will require separate approval by the Authorized Officer (AO).

Reclamation: On the existing Burlington Resources Oil & Gas Company LP, Howell K #1 Where vehicular travel has occurred as a "convenience" and interim reclamation/vegetation has been compromised, immediate remediation of the affected areas is required. Additionally, where erosion has occurred and compromised the reclamation of the well location, the affected area must be promptly remediated so that future erosion is prevented and the landform is stabilized.

Damage to Roads: Any road drainage structures (silt traps, culverts, drainage ditches or water turnouts) that are damaged or destroyed during the temporary use of the Burlington Resources Oil & Gas Company LP, Howell K #1 will be rebuilt or replaced by Burlington Resources Oil & Gas Company LP, as per the authorized officer.

Seeding: All disturbed areas, except for the access road driving surface, the shoulders and well pad, inside of the anchors, will be re-seeded.

Seed Mix

Туре	Variety or Cultivator	PLS/A	
Indian Ricegrass	Paloma or Rimrock	6.0	
Four-wing Saltbush	Unknown	4.0	
		·	

Species shall be planted in pounds of pure live seed per acre: Present Pure Live Seed (PLS) = Purity X Germination/100. Two lots of seed can be compared on the basis of PLS as follows:

Source No. One (poor quality)

Purity

Source No. two (better quality)

Purity

Source No. two (better quality)

Purity

80 percent

Germination

40 percent

Percent PLS

20 percent

Percent PLS

Source No. two (better quality)

Purity

80 percent

Percent PLS

50 percent

5 lb. bulk seed required to make

1 lb. PLS

2 lb. bulk seed required to make

1 lb. PLS

Seed mixtures used must be certified. There will be no primary or secondary noxious weeds in seed mixture. Seed labels from each bag will be available for inspection while seed is being sown.

FARAHNGTON COPY

Time Frame: Disturbed areas will be re-contoured and re-seeded within 30 days of final construction. The timeframe may be extended on a case-by-case basis with AO approval. Seeding will be repeated if a satisfactory stand is not obtained as determined by the AO upon evaluation after the second growing season.

Seeding Techniques: Before seeding compacted areas will be ripped to a depth of 12" and disked to a depth of six inches. A disk-type drill with two boxes for various seed sizes will be used. The drill rows will be eight to ten inches apart and seed planted one-half inch to one inch deep. A drag, packer or roller will follow the seeder to ensure uniform seed coverage and adequate compaction. Drilling will be done on the contour where possible, not up and down the slope. Where the slope is too steep for contour drilling a "cyclone" hand seeder or similar broadcast seeder will be used. Seed will be covered to the depth described above by whatever means is practical, i.e. hand raked. If the seed is not covered, the prescribed seed mixture amount (pounds/acre/PLS) will be doubled.

Land Farming: No excavation, remediation or closure activities will be authorized without prior approval on any federal or Indian mineral estate, federal surface or federal ROW. A Sundry Notice (DOI, BLM Form 3160-5) must be submitted with an explanation of the remediation or closure plan for on-lease actions.

Site Condition: Well pad area will be maintained in a workmanlike manner and sanitary condition with due regard to safety, conservation and appearance at all times. A regular maintenance program shall include.

Waste Disposal: Waste materials produced during all phases of operation will be disposed of promptly in an approved manner so it will not impact the air, soil, water, vegetation or animals. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes and equipment. All liquid waste, completion fluids and drilling products associated with oil and gas operations will be contained and then buried in place, or removed and deposited in an approved disposal site. Portable toilets will remain on site throughout well pad construction, drilling and reclamation.

Cultural Resources

Construction, construction maintenance or any other activity outside the areas permitted by the Sundry Notice will require additional approval and may require a new cultural survey and clearance.

Employee Education: All employees of the project will be informed cultural sites are to be avoided by all personnel, personal vehicles and company equipment. They will also be notified it is illegal to collect, damage or disturb cultural resources.

Discovery of Cultural Resources in the Absence of Monitoring: If, in its operations, operator/holder discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to Bureau of Land Management Field Manager. The Bureau of Land Management will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the Bureau Land Management will evaluate the significance of discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by a Bureau of Land Management or permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed. Failure to notify the Bureau of Land Management about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

Discovery of Cultural Resources during Monitoring: If monitoring confirms the presence of previously unidentified cultural resources, then work in the vicinity of the discovery will be suspended and the monitor will promptly report the discovery to the Bureau of Land Management Field Manager. The Bureau of Land Management will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the Bureau of Land Management will evaluate the significance of the discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. A Bureau of Land

Management or permitted cultural resources consultant may perform minor recordation, stabilization, or data recovery. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed.

Damage to Sites: If, in its operations, operator/holder damages, or is found to have damaged any previously documented or undocumented historic or prehistoric cultural resources, excluding "discoveries" as noted above, the operator/holder agrees at his/her expense to have a permitted cultural resources consultant prepare and have executed a Bureau of Land Management approved data recovery plan. Damage to cultural resources may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).