

HITP - _38_

**GENERAL
CORRESPONDENCE**

**YEAR(S):
2013-2014**

New Mexico Environment Department Revenue Transmittal

Description	Fund	CES	DFA Org.	DFA ED Acct. Org.	ED Acct.	Amount
1 CY Reimbursement Project Tax	064		01			1
2 Gross Receipt Tax	064		01	2329 900000	2329134	2
3 Air Quality Title V	092		13	1690 900000	4169134	3
4 PRP Prepayments	248		14	9690 900000	4969014	4
5 Climax Chemical Co.	248		14	9690 900000	4969015	5
6 Circle K Reimbursements	248		14	9690 900000	4969248	6
7 Hazardous Waste Permits	339		27	1690 900000	4169027	7
8 Hazardous Waste Annual Generator Fees	339		27	1690 900000	4169339	8
9 Water Quality - Drinking Water	340		28	1690 900000	4169028	9
10 Water Quality - Oil Conservation Division	341		29	2329 900000	2329029	10
11 Water Quality - GW Discharge Permit	341		29	1690 900000	4169029	11
12 Air Quality Permits	631		31	1690 900000	4169031	12
13 Payments under Protest	651		33	2919 900000	2919033	13
* 14 Xerox Copies	652		34	2349 900000	2349001	14
15 Ground Water Penalties	652		34	2349 900000	2349002	15
16 Witness Fees	652		34	2349 900000	2349003	16
17 Air Quality Penalties	652		34	2349 900000	2349004	17
18 OSHA Penalties	652		34	2349 900000	2349005	18
19 Prior Year Reimbursement	652		34	2349 900000	2349006	19
20 Surface Water Quality Certification	652		34	2349 900000	2349009	20
21 Jury Duty	652		34	2349 900000	2349012	21
22 CY Reimbursements (i.e.: telephone)	652		34	2349 900000	2349014	22
* 23 UST Owners List	783		24	9690 900000	4969201	23
* 24 Hazardous Waste Notifiers List	783		24	9690 900000	4969202	24
* 25 UST Maps	783		24	9690 900000	4969203	25
* 26 UST Owners Update	783		24	9690 900000	4969205	26
* 28 Hazardous Waste Regulations	783		24	9690 900000	4969207	28
* 29 Radiologic Tech. Regulations	783		24	9690 900000	4969208	29
* 30 Superfund CERCLIS List	783		24	9690 900000	4969211	30
* 31 Solid Waste Permits Fees	783		24	9690 900000	4969213	31
32 Smoking School	783		24	9690 900000	4969214	32
* 33 SWQB - NPS Publications	783		24	9690 900000	4969222	33
* 34 Radiation Licensing Regulations	783		24	9690 900000	4969228	34
* 35 Sale of Equipment	783		24	9690 900000	4969301	35
* 36 Sale of Automobile	783		24	9690 900000	4969302	36
** 37 Lust Recoveries	783		24	9690 900000	4969614	37
** 38 Lust Prepayments	783		24	9690 900000	4969615	38
39 Surface Water Publication	783		24	9690 900000	4969801	39
40 Exxon Reese Drive Ruidoso - CAF	783		24	9690 900000	4969242	40
41 Emerg. Hazardous Waste Penalties NOV	957		32	1640 900000	4164032	41
42 Radiologic Tech. Certification	987		05	1690 900000	4169005	42
44 UST Permit Fees	989		20	1690 900000	4169020	44
45 UST Tank Installers Fees	989		20	1690 900000	4169021	45
46 Food Permit Fees	991		26	1690 900000	4169026	46
43 Other						43

150.00

* Gross Receipt Tax Required ** Site Name & Project Code Required TOTAL: _____
 Contact Person: _____ Phone #: _____ Date: _____

Received in ASD By: _____ Date: _____ RT #: _____ ST# _____

**ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH**

I hereby acknowledge receipt of Check No. 906074 dated 4/29/2013

or cash received on _____ in the amount of \$ 150.00

from Encana Oil & Gas (USA) Inc.

for HITP-038

Submitted by: Rachul Herrera Date: 5/02/13

Submitted to ASD by: Rachul Herrera Date: 5/02/13

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility: _____ Renewal: _____

Modification _____ Other Temp Permission Fee

Organization Code 521.07 Applicable FY _____

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

NEW MEXICO ENVIRONMENT DEPARTMENT - ALBUQUERQUE FIELD OFFICE DAILY CHECK RECEIPT LOG

DATE RECEIVED	WALK-IN	MAIL	NAME ON CHECK	DATE OF CHECK	CHECK/MONEY ORDER#	PROGRAM ACCOUNT CODE	AMOUNT OF CHECK	DATE DEPOSITED	DEPOSITED BY:
5/01/13		X	Encana Oil + Gas	4/29/13	906674		150.00		
TOTAL							150.00 -50.00		

REVENUE TRANSMITTAL SHEET

Description	Fund	Dept.	Share Acct	Sub Acct	Amount
Liquid Waste	34000	Z3200	496402		
Water Recreation Facilities	40000	Z8501	496402		
Food Permit Fees	99100	Z2600	496402		
OTHER					

encana

April 29, 2013

Mr. Brad Jones
Environmental Engineer
New Mexico Oil Conservation Division
1220 S. Saint Francis Dr
Santa Fe, NM 87505

Dear Mr. Jones:

**Subject: Hydrostatic Test Individual Temporary Permission HITP-038
Encana Oil & Gas (USA), Inc.
Lybrook Trunk Line Phase 1 Project
Location: Unit N of Section 2, Township 22 North, Range 6 West, NMPM,
Sandoval County, New Mexico**

Please find attached a check payable to the Water Quality Management Fund for the temporary permission fee associated with Hydrostatic Test Individual Temporary Permission (HITP-038) for the testing of Encana Oil & Gas (USA), Inc.'s Lybrook Trunk Line Phase 1. Also attached is a signed copy of the conditions for HITP-038.

At this time, we are still planning on conducting the hydrostatic test during the week of May 6th, 2013. We will notify you if anything changes with regard to timing of the test and acknowledge that permission expires 120 calendar days after issue.

We would like to thank you for working with us to get this permission granted in a timeframe that accommodates our construction schedule. We very much appreciate it.

If there are any questions concerning this request or additional information is required, please contact me at (720) 250-7289.

Sincerely,



Melissa Ritchie
Facility Engineer

kd
Temporary Permission Fee Payment
Signed Copy of the Conditions for HITP-038

cc: K. Retzlaff, T. Smith, B. Gerou, W. Rogers

RECEIVED OGD
2013 APR 30 P 2:20

Encana Oil & Gas (USA) Inc.

Republic Plaza 370 17th Street Suite 1700 Denver CO 80202 USA 303.623.2300 encana.com

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



April 17, 2013

Ms. Melissa Ritchie
Encana Oil & Gas (USA), Inc.
370 17th Street, Suite 1700
Denver, Colorado 80202

**Re: Hydrostatic Test Individual Temporary Permission HITP-038
Encana Oil & Gas (USA), Inc.
Lybrook Trunk Line Phase 1 Project
Location: Unit N of Section 2, Township 22 North, Range 6 West, NMPM,
Sandoval County, New Mexico**

Dear Ms. Ritchie:

The Oil Conservation Division (OCD) has received Encana Oil & Gas (USA), Inc.'s (Encana) notice of intent, dated April 15, 2013, for authorization to collect and dispose of approximately 24,000 gallons of wastewater generated from a hydrostatic test of an approximately 8 miles (41,600 feet) of an new 6-inch natural gas gathering and transmission pipeline system, located approximately 12 miles south-southeast of Lybrook, New Mexico. The proposed collection location is within Encana's pipeline right-of way in Unit N of Section 2, Township 22 North, Range 6 West, NMPM, Sandoval County, New Mexico. No surface discharge is proposed by Encana. The hydrostatic test wastewater will be discharged directly into an OCD approved C-133 hauler and delivered to Basin Disposal, Inc.'s Class II injection well for injection and disposal. OCD acknowledges the receipt of the filing fee (\$100.00) from a submittal dated April 15, 2013. This permit will not become effective until OCD receives the temporary permission fee of \$150.00 pursuant to 20.6.2.3114 NMAC. Please make the check payable to the Water Quality Management Fund.

Based on the information provided in the request, temporary permission is hereby granted for the collection, retention, and disposal of the hydrostatic test wastewater generated from the pipeline test with the following understandings and conditions:

1. Encana will be testing approximately 8 miles (41,600 feet) of an new 6-inch natural gas gathering and transmission pipeline system, located approximately 12 miles south-southeast of Lybrook, New Mexico;

2. Encana shall ensure no discharge will occur at the hydrostatic test wastewater collection/discharge location: within Encana's pipeline right-of way in Unit N of Section 2, Township 22 North, Range 6 West, NMPM, Sandoval County, New Mexico;
3. Encana will acquire the hydrostatic test water from the following source(s): Lybrook Water Users Association, Lybrook, New Mexico;
4. Encana will generate approximately 24,000 gallons of hydrostatic test wastewater from the test event that will be slowly discharged via a system of flexible hoses and temporary piping directly into an OCD approved C-133 hauler, while awaiting transfer, injection and disposal at Basin Disposal, Inc.'s Class II injection well (NM1-005/API# 30-045-26862 /SWD Order R-8524);
5. Encana will have personnel on-site to oversee and control the transfer and utilize collection pans placed below the collection points to prevent an unauthorized release;
6. Encana will not discharge any hydrostatic test wastewater generated from the test event to the ground or within the easement right-of-way;
7. Encana will not be analyzing the hydrostatic test wastewater because of the following: there will be no discharge the wastewater to the surface or surface water; the wastewater has been demonstrated to be RCRA exempt waste and the proposal is to transfer the wastewater to either Basin Disposal, Inc.'s Class II injection well (NM1-005/API# 30-045-26862 /SWD Order R-8524) for injection and disposal;
8. Encana will ensure the transfer the hydrostatic test wastewater via an OCD approved C-133 water hauler to Basin Disposal, Inc.'s Class II injection well for injection and disposal;
9. Encana shall remove all hydrostatic test wastewater from the collection/retention location within ten (10) calendar days of the completion of the hydrostatic test;
10. Encana shall restore any surface area impacted or disturb from the approved activities;
11. Encana shall implement best management practices to prevent unauthorized releases during the transfer/collection activities;
12. Encana shall ensure that the transfer/collection activities do not cause any fresh water supplies to be degraded or to exceed standards as set forth in Subsections A, B, and C of the 20.6.2.3103 NMAC (the New Mexico Water Quality Control Commission Regulations);
13. Encana must properly notify the landowner(s) of the proposed collection/retention of the approved activities prior to the hydrostatic test event; and
14. Encana shall report all unauthorized discharges, spills, leaks and releases of hydrostatic test water and conduct corrective action pursuant to OCD Rule 29 (19.15.29 NMAC).

Ms. Ritchie
HITP - 038
April 17, 2013
Page 3 of 3

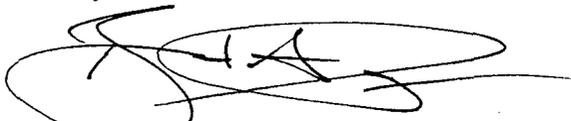
It is understood that the hydrostatic test will begin approximately May 6, 2013. This temporary permission will expire within 120 calendar days of its issue date. Temporary permission may be revoked or suspended for violation of any applicable provisions and/or conditions.

This permit will not become effective until OCD receives the temporary permission fee of \$150.00 pursuant to 20.6.2.3114 NMAC. Please make the check payable to the Water Quality Management Fund.

Please be advised that approval of this request does not relieve Encana of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Encana of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,



Brad A. Jones
Environmental Engineer

BAJ/baj

Cc: OCD District III Office, Aztec
Mr. Wesley Rogers, Encana Oil & Gas, Inc., 6584 E. Milan Street, Farmington, NM 87402

Conditions acknowledged, 4/29/13.



Melissa Ritchie
Encana Oil + Gas (USA) Inc.

**ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH**

I hereby acknowledge receipt of Check No. 899524 dated 3/29/13

or cash received on _____ in the amount of \$ 100.00

from Encang Oil & Gas

for HITP-038

Submitted by: Rachel Herrera Date: 4/18/13

Submitted to ASD by: Rachel Herrera Date: 4/18/13

Received in ASD by: _____ Date: _____

Filing Fee New Facility: _____ Renewal: _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY _____

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

encana

RECEIVED OCD

2013 APR 16 A 11: 04

April 15, 2013

Mr. Brad Jones
Environmental Engineer
New Mexico Oil Conservation Division
1220 S. Saint Francis Dr
Santa Fe, NM 87505

Dear Mr. Jones:

Subject: Notice of Intent to Discharge Hydrostatic Test Water, Lybrook Trunk Line Phase 1, Sandoval County, Encana Oil & Gas (USA) Inc, San Juan Basin Operations

Encana Oil & Gas (USA) Inc. (Encana) is submitting this Notice of Intent (NOI) to the New Mexico Oil Conservation Division (OCD) for a hydrostatic test of our Lybrook Trunkline #1 and is requesting permission for discharge from that activity. This trunkline is new construction of a 6" pipeline that will gather gas production from several wells in the area and transport the gas to the Enterprise Products Operating LLC gathering system. It is expected that this test will require approximately 24,000 gallons of water that will be obtained from the Lybrook Water Users Association, a nearby water supply source.

The trunkline involved in this test will all be upstream of any refining process and therefore is an E&P waste, exempt from the hazardous waste definition. Encana intends to collect the hydrostatic test water in tank trucks and dispose of it in a Class II injection well (20.6.2.5002B.(2) NMAC) owned by Basin Disposal in Bloomfield, NM. Therefore, no surface discharge of the hydrostatic test water is planned. The testing of this line is expected to occur the week of May 6th, 2013.

The attached includes the required information for the NOI as stated in the "Guidelines for Hydrostatic Test Dewatering" dated January 11, 2007.

The filing fee in the amount of \$100.00, payable to the Water Quality Management Fund, is included with this request.

If there are any questions concerning this request or additional information is required, please contact me at (720) 876-3161.

Sincerely,



Kirsten Derr
Environmental Specialist

kd
Attachments

cc: M. Ritchie

Encana Oil & Gas (USA) Inc.

Republic Plaza 370 17th Street Suite 1700 Denver CO 80202 USA 303.623.2300 encana.com

Background

The Lybrook Trunkline #1 is a new construction 6" pipeline that will gather gas production from several wells in the area and transport that gas to the Enterprise Products Operating LLC gathering system. The line will be located just south of US Hwy 550 near Counselor, New Mexico and run 8 miles (generally in the east-west direction) with this phase originating in between Sections 2 and 11 of T22N R6W and terminating in Section 36 of T23N R7W at an inter-connect with Enterprise Products Operating LLC 2C-161 pipeline. The hydrostatic test of the pipeline following construction will generate waste that is considered to be E&P generated waste which is exempt from the definition of hazardous waste [40 CFR 261.4(b)(5)]. The anticipated start date of the testing is May 6, 2013.

Item a. Name and address of the proposed discharger

Proposed Discharger	Encana Oil & Gas (USA) Inc. Melissa Ritchie, Project Manager 370 17 th Street, Suite 1700 Denver, CO 80202
Local Representative	Wesley Rogers, Site Construction Supervisor Encana Oil & Gas (USA) Inc. 6584 E. Main Street Farmington, NM 87402

Item b. Location of the discharge, including a street address, if available, and sufficient information to locate the facility with respect to surrounding landmarks

The dewatering from the line will occur at the east end of the 41,600 foot 6" line following testing of a series of four sections of the newly constructed pipeline. Dewatering will occur within the right-of-way (ROW). The ROW easement No. RW-32965 (Attachment 1) for the construction and testing phase of the project is 50 ft from center line on either side of the pipeline (see highlighted stipulations on page 2 and 3 of Attachment 1). The ROW for the pipeline extends an additional mile in the direction of the pipeline beyond the dewatering location in the south easterly direction as the second phase of the pipeline will be constructed in that ROW. It is anticipated that the area used for truck staging, truck turning and dewatering will be within the easement on either side of the pipeline and approximately 100 feet to the NW and 200 feet to the southeast along the pipeline ROW.

Directions to the dewatering location are as follows:

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 53.6 miles to Mile Marker 97.7;

Go right (South-easterly) for 3.2 miles to intersection;

Go left (South-easterly) for 0.6 miles to dewatering location.

No street address for dewatering location is available.

Item c. Legal description (Section/Township/Range) of the discharge location

The dewatering location is in the SESW Section 2, Township 22N, Range 6W. Water trucks will be deployed along the road at this location to directly capture the hydrostatic test water as it is removed from the line through a manifold system.

Item d. Maps (site-specific and regional) indicating the location of the pipelines to be tested

Figure 1 shows the location of the Lybrook Trunkline in Sandoval County, just south of the Rio Arriba/Sandoval County line. Figure 2 shows the extent of the Lybrook Trunkline in relation to the local roads. The ROW easement is also shown on Figure 2. The dewatering location is adjacent to an existing road. The trucks will not be required to leave the road during the dewatering of the pipeline and the width of the construction ROW will allow for the trucks to turn within the ROW to the southeast of the dewatering location

Item e. A demonstration of compliance to the following siting criteria or justification for any exceptions

i. Within 200 feet of a watercourse, lakebed, sinkhole, or playa lake

There are no watercourses, lakebeds, sinkholes, or playa lakes within 200 feet of the dewatering location as shown in Figure 3 which references the National Hydrography Dataset from USGS (updated Sept 6, 2012) and USGS Counselor Quadrangle. The closest intermittent stream is more than 1000 feet to the northwest and the closest pond is more than 1200 feet to the southeast.

ii. Within an existing wellhead protection area or 100-yr floodplain

Under the most conservative interpretation of the well head protection area rule 19.15.2.7W(8) NMAC, the discharge location would need to be within 1,000 feet of a water supply well or spring, to be considered within a wellhead protection area. The point of diversion locations provided by The New Mexico Office of the State Engineer Waters and Interstate Stream Commission (mapped data set updated July, 2011) lists the closest well to the dewatering location to be a livestock well approximately 1200 feet to the southeast as shown on Figure 4. Very little information about this livestock well (POD Number SJ 00681 11, see Attachment 2) is known as this well is not listed on the well list for the basin. The Water Rights Summary is included as Attachment 2. Because the hydrostatic test water will be pumped immediately from the pipeline to water trucks, there will be no discharge to the ground, and therefore, no impact to the livestock well.

GIS based USGS topography (date unknown) was reviewed for springs within 1,000 feet of the dewatering location. No springs were evident within 1,000 feet.

The dewatering location is located two miles to the southwest of a FEMA Flood Zone A as shown on FEMA Flood Map Plate 35043C0075D, Sandoval County Unincorporated and Incorporated Areas March 18, 2008. The area surrounding the dewatering location is designated as a FEMA Flood Zone D which is defined as possible but undetermined flood hazard as shown on Figure 4 (FEMA Flood Hazard Areas, updated March 19, 2013).

iii. Within, or within 500 feet of a wetland

The area of the dewatering location is not within, or within 500 feet of a wetland. The U.S. Fish and Wildlife Service, National Wetlands Inventory mapping system website (<http://www.fws.gov/wetlands/Data/Web-Map-Services.html>) and

<http://www.fws.gov/wetlands/Wetlands-Mapper.html>) was accessed for the general area of the dewatering location. No wetland was mapped at or within 500 feet of the dewatering location, Figure 5. In addition, the USGS Counselor Quadrangle and the USGS topo overlay available on the U.S Fish and Wildlife service National Wetlands Inventory does not indicate the presence of a wetland within 500 feet of the dewatering location. Much of this area has not been activity mapped, however, several ponds and intermittent stream are visible on the map outside of the 500 foot buffer.

The U.S. Department of Agriculture Soil Survey of Sandoval County Area, New Mexico (1987) was reviewed. As shown in Figure 6, the soil unit at the dewatering location is the Vessilla-Menefee-Orlie association and the soil in the area to the southeast is the Orlie-Sparham association. Vessilla and Menefee are classified as upland soils, Orlie and Sparham as more common on slopes and valleys. The Orlie unit is classified as Group C, having slow infiltration rate when thoroughly wet. The Vessilla, Menefee and Sparham units are classified as Ground D, having very slow infiltration rate with high runoff potential when thoroughly wet. Since the Vessilla and Menefee are both upland soils, neither are subject to flooding, the Orlie which is typically on slope sides is also not subject to flooding. The Sparham may experience brief occasional flooding during seasonal thunderstorms in July – October. Although the Orlie-Sparham association is listed as partially hydric, wetland vegetation is not apparent in the area.

iv. Within the area overlying a subsurface mine

The New Mexico Mining and Minerals Division online mapping application was accessed to verify if the area of the dewatering location is in proximity to any subsurface mines. There is no overlay available therefore visual verification was completed using the following websites, <http://www.emnrd.state.nm.us/Maps/CoalMines/index.html>, <http://www.emnrd.state.nm.us/Maps/MMQActiveMines/index.html>. Figure 7 shows there are no subsurface mines in the areas based on this verification.

v. Within 500 feet from the nearest permanent residence, school, hospital, institution, or church.

The dewatering location is within an area managed by the New Mexico State Land Office north of BLM land. There are no permanent buildings within 500 feet of the dewatering location as shown in Figure 8.

Item f. Brief description of the activities that produce the discharge

The Lybrook Trunkline #1 has been designed and will be constructed per ASME B31.8 piping code. As recommended by the inspection and testing requirements of the code, the pipeline will be hydrostatically tested following construction and prior to commissioning of the line. The hydrostatic test will confirm the integrity of the line. The 8 mile pipeline will be divided into four sections and the test will be conducted starting at the western-end of the line and finishing at the dewatering location.

The source of the hydrostatic test water will be from a municipal water supply (Lybrook Water Users Association). This freshwater will be transported to the western-most end of the Lybrook Trunkline #1 and will be charged into the first segment of piping with a pump. The pump will be utilized to increase the pressure in the line to test pressure. The test pressure will be maintained for a duration determined by the requirements of the code. Following testing of the first segment, the pressurized

water will be transferred to the adjacent pipe segment by way of a testing manifold. Testing of each subsequent segment will be conducted in the same manner as the first segment.

Water will be conveyed between piping segments without exiting the piping system. After testing of the final segment is complete, the last segment will be evacuated by trucks and the test water will be transported to a disposal facility by one of the following C-133 approved haulers:

- Dawn Trucking
- M&R Trucking
- Three Rivers Trucking

It has been determined that water will be considered E&P solid waste and will be sent to the Class II Injection well (Permit No. NM 001-005) owned and operated by Basin Disposal in Bloomfield, New Mexico for disposal. A C-138 for that facility is in Attachment 3

Item g. Method and Location for collection and retention of fluids and solids

Collection of hydrostatic test fluids will be completed at the east end of the pipeline at the location described in Item b. Collection of solids is not anticipated. There is no intention to retain either fluids or solids at any location following the test. Waste will be transported directly to the disposal facility described in Item f.

The method by which fluids will be collected is by loading trucks. Loading of the trucks will be completed by the following steps:

1. Trucks will be connected to a discharge manifold system and the pipeline with hoses.
2. Hydrostatic test water will be pushed through the final segment of tested pipe and through the discharge manifold system into the truck by a pig propelled with compressed air. The discharge manifold will be utilized to maintain flowing conditions during dewatering.
3. Trucks will transport dewatered fluids directly to the disposal facility.

Item h. Brief description of best management practices to be implemented to contain the discharge onsite and to control erosion

Water flow will be controlled during truck loading by valves installed on the discharge manifold. Control of the rate of dewatering will prevent overflow of the trucks and loss of containment. Additionally, drip pans will be located at the hose connections to the truck in order to mitigate loss of containment upon disconnection of the hoses.

No erosion control measures are necessary because the fluids will not be discharged at site (alternate to send to disposal has been elected).

Item i. Request for approval of an alternative treatment, use, and/or discharge location (other than the original discharge site), if necessary

It is not anticipated that alternative treatment will be required, therefore, no request is necessary.

Item j. Proposed hydrostatic test wastewater sampling plan

No wastewater sampling plan is necessary as the fluid can be classified as E&P solid waste and will be disposed at a Class II injection well.

Item k. *Proposed method of disposal of fluids and solids after test completion, including closure of any pits, in case the water generated from test exceeds the standards as set forth in Subsections A, B, and C of the 20.6.2.3103 NMAC (the New Mexico Water Quality Control Commission Regulations)*

All fluids will be transferred into water trucks and immediately transported to Basin Disposal for injection. No solid waste is anticipated.

Item l. *Brief description of the expected quality and volume of the discharge*

The water used will be freshwater and the lines to be tested are all new lines that have not been exposed to any product streams. Therefore, the expected quality of the water at the dewatering location is expected to be freshwater that may have picked up some soil material from the construction of the line and small concentrations of any compounds used in the welding and construction process. Volume to be collected will be approximately 24,000 gallons.

Item m. *Geological characteristics of the subsurface at the proposed discharge site.*

Regional Features

The hydrostatic test dewatering location is located within the central portion of the San Juan Basin. The San Juan Basin is an asymmetric Laramide structural basin at the eastern edge of the Colorado Plateau. The basin covers approximately 22,000 square miles in Northwestern New Mexico and edges toward southern Colorado, Utah, and Arizona. The basin contains more than 15,000 feet of sedimentary section and includes the aquifers of the basin which generally are coincident with the varying geologic units mapped within the San Juan Basin. The sedimentary section is overlying Precambrian granite and metamorphic rock in the basement of the basin.

Site Geology

The hydrostatic test dewatering location is located on outcrop exposures of the San Jose Formation as shown in Figure 9. The San Jose Formation is a Tertiary (Eocene) sedimentary unit consisting of interbedded sandstone, shale, and variegated shale deposits. It is a nonmarine package of strata deposited in floodplain, fluvial and lacustrine settings with a maximum thickness of approximately 2,400 feet. Sandstone beds range from fine- to coarse-grained, are arkosic and sporadically conglomeratic and often contain petrified wood (Fassett, 1974). At the water discharge area the majority of the San Jose Formation has been eroded and it is only approximately 300 feet thick. Its base is an unconformable surface. It is underlain by the Tertiary (Paleocene) Nacimiento Formation. The Nacimiento Formation consists of interbedded sandstone and shale which were deposited in a nonmarine (fluvial to lacustrine) environment and is approximately 1,500 feet thick. Sandstones occur occasionally and were deposited as fluvial channel-fill sand deposits; lateral correlation of sandstone bodies is tenuous. Structural dip of strata is very gentle to the north/northeast, with approximately 1 degree of dip at an approximate N20E azimuth.

Regional Hydrology

The sediment fill in the San Juan Basin is composed of both marine and continental deposition and its present configuration is largely a result of mid-Tertiary Laramide tectonic events. The sequence of deposits reflects a shift from largely continental deposition in Triassic (± 250 -200 million years ago [ma]) and Jurassic (± 200 -145 ma) times to marine deposition in Cretaceous time (± 145 -65.5 ma), then back to continental deposition in Tertiary time (± 65.5 -1.6 ma). The basic hydrogeologic components of the San Juan Basin include:

- Structural and bedrock features: The basin is flanked by a number of complex uplifts such as the Nacimiento uplift to the east, the San Juan Mountains to the north, the Defiance uplift to the west and the Zuni uplift to the south. Subsurface structural relief within the basin varies: about 2,500 ft along the Chaco slope; 3,000 ft in the central basin; and 4,000 ft along the Hogback monocline at the four corners platform. With respect to the Nacimiento uplift and San Juan uplift, the structural relief within the basin is 14,000 ft and 20,000 ft respectively.

- Hydrostratigraphic units: The mappable bodies of the basin fill are grouped on the basis of origin and position within the stratigraphic sequence. In the San Juan Basin structural basin, the terms "aquifer" have been associated for the most part with the formal name of the geologic unit that forms the significant part of the aquifer. Chronostratigraphic classes include units both marine and continental deposition. Transmissivity values vary greatly throughout the basin. Conditions that most affect transmissivity are the percentage of sand and degree of sorting, as well as the static connectivity of discrete sandstone bodies, within each aquifer, and the aquifer thickness.

Local Groundwater Hydrology

The hydrostatic test dewatering location lies upon the San Jose Formation. The Cuba Mesa Member of the San Jose formation is the most prolific aquifer within the San Jose Formation; however, recharge in the central basin is very limited due to the arid climate and low annual precipitation. The more productive Cuba Mesa Member aquifers lie in closer proximity to the eastern hogback adjacent to the Nacimiento Uplift where steeply-dipping beds serve as a conduit connecting subsurface aquifers with recharge at the outcrop (Stone, 1992). Water produced from Cuba Mesa Member aquifers have been known to have elevated iron content in places (Stone, 1992). The San Jose aquifer is rather poorly hydraulically connected to the Nacimiento aquifer on a regional scale due to the architecture of the two formations, in particular the general lack of static connectivity of their coarse members as well as the unconformity that separates them. The primary water type within the San Jose and Nacimiento aquifers is sodium-bicarbonate or sodium-sulfate; total dissolved solids varies from 400-10,000+ parts-per-million across the basin (Stone, 1992). The Nacimiento Formation is generally not an important aquifer due to its overall fine-grain texture (Stone, 1992).

Item n. The depth to and total dissolved solids concentration of the ground water most likely to be affected by the discharge

Characterization of the groundwater stored in the Tertiary aquifers of the central basin has not been performed in detail; this is likely due to the lack of a significant recharge mechanism and hence limited water resource in the area. The State Engineers Office water well database indicates no domestic water wells are present nearby the dewatering location; only 17 wells are registered in the San Juan Basin portion of Sandoval County. Stone (1992) states that total dissolved solids (TDS) of the water in the Tertiary aquifers of the central basin may be greater than 4,000 parts per million (ppm). Aquifers at the dewatering location may lie between approximately 50 to 1,900 feet deep. There is no analytical data available for the wells in the area.

Item o. Identification of landowners at and adjacent to the discharge and collection/retention site.

As described previously, the dewatering location is within Section 2 just north of the border of Section 11 in T22N, R6W. Section 2 is land managed by the State of New Mexico, Commissioner of Public Lands, and the majority of Section 11 is BLM land. All land within the 1/3 mile buffer of the entire length of the lateral is either land managed by the Commissioner of Public Lands or BLM land as shown in Figure 10, with one small exception. There is a small parcel between 3 and 4 acres in area about 0.2 miles to the southeast of the dewatering location that is listed as tribal ownership. However, as shown in Figure 11, the only landowner in the area adjacent to the working ROW is land managed by the Commissioner of Public Lands.

References:

Stone, W. J., 1992, Ground-water resources of the southeastern San Juan Basin: New Mexico Geological Society Guidebook, 43rd Field Conference, San Juan Basin IV, 1992, P407-408.

Fassett, J. E., 1974, Cretaceous and Tertiary rocks of the eastern San Juan Basin, New Mexico and Colorado, *in* Ghost Ranch: New Mexico Geol. Soc. 25th Field Conf. Guidebook, p. 225–230.

Attachment 1
Right of Way Easement



Ray Powell, M.S., D.V.M.
COMMISSIONER

State of New Mexico
Commissioner of Public Lands
310 OLD SANTA FE TRAIL
P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

COMMISSIONER'S OFFICE
Phone (505) 827-5760
Fax (505) 827-5766
www.nmstatelands.org

August 31, 2012

Encana Oil & Gas (USA) Inc.
370 17th Street, Suite 1700
Denver, CO 80202

Attn: Holly Hill

Re: New Mexico State Right of Way # R-32965

Dear Ms. Hill,

Enclosed is an approved original copy of the above captioned Right of Way Easement. Also, enclosed for your convenience, is an "Affidavit of Completion" form to be completed and returned to this office when your project has been completed.

If any corrections are needed, please notify this office and we will re-type or amend the grant as necessary.

If we can be of further assistance to you, please do not hesitate to contact me 827-5773.

Sincerely,

A handwritten signature in cursive script, appearing to read "Nick Jaramillo".

Nick Jaramillo, Management Analyst
Rights of Way and Water Resources Bureau
Surface Resources Management Division

Enclosures

**STATE OF NEW MEXICO
COMMISSIONER OF PUBLIC LANDS
PIPELINE RIGHT-OF-WAY**

Right-of-Way Easement No. RW-32965

This indenture made this 30th day of August, 2012 by and between the State of New Mexico, acting by and through its Commissioner of Public Lands, "Grantor", and Encana Oil & Gas (USA) Inc. whose address is 370 17th Street, Suite 1700, Denver, CO 80202 "Grantee";

WITNESSETH:

That Grantor, for and in consideration of the sum of \$10,067.70-----Ten Thousand Sixty Seven Dollars and 70/100-----cash in hand, receipt of which is hereby acknowledged, and other good and valuable consideration, hereby conveys to grantee a right-of-way for the sole and exclusive purpose of placing a 12 3/4 O.D. buried steel pipeline including the right to enter upon the real estate hereinafter described at any time that it may see fit to construct, maintain and repair the structures upon the right-of-way, together with the right to remove trees, brush, undergrowth, and other obstructions interfering with the location, construction, and maintenance of said right-of-way.

The right-of-way hereby granted covers a strip of land 30* feet in width in Sandoval County, as more particularly described by the attached centerline description and survey plats, which are incorporated herein as Exhibit A.

This grant is made upon the following express terms and conditions:

1. This right-of-way is granted for a term of 35 years. The grant may be renewed for additional periods upon application to Grantor. Any such renewals are subject to such terms and conditions as the Grantor may require, and payment of compensation.
2. Grantor reserves the right to authorize or grant rights-of-way or other easements to third parties, which may be over, parallel to, or across this right-of-way. In such cases, the subsequent grantee may, at the discretion of the Grantor, be required to post a bond guaranteeing payment for damages to the installations and improvements of Grantee herein. In crossing any right-of-way for a highway, road, telephone, telegraph, transmission line, etc. Grantee herein will exercise due care so as not to interfere with said rights-of-way and will comply with all applicable laws, rules, and regulations in connection with the making of such crossings.
3. The right to grant additional rights-of-way or easements within this right-of-way belongs exclusively to Grantor. Grantor hereby agrees, however, that in the event Grantor elects to exercise such right and if Grantee herein is the New Mexico State Highway and Transportation Department, Grantor will secure in writing the agreement of subsequent right-of-way grantee that no facilities will be constructed or installed within the right-of-way subsequently granted without first obtaining from the Department a permit prescribing the conditions under which facilities may be placed within such right-of-way in accordance with the Department's applicable rules and regulations.
4. GRANTEE EXPRESSLY AGREES THAT PRIOR TO THE CONSTRUCTION OR INSTALLATION OF ANY FACILITIES WITHIN THE RIGHT-OF-WAY GRANTED HEREIN, GRANTEE WILL DETERMINE WHETHER THE RIGHT-OF-WAY IS WITHIN A PREVIOUSLY ESTABLISHED NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT RIGHT-OF-WAY, AND IF IT IS, GRANTEE WILL OBTAIN FROM THE DEPARTMENT A PERMIT THAT PRESCRIBES THE CONDITIONS UNDER WHICH

FACILITIES MAY BE PLACED WITHIN THE RIGHT-OF-WAY IN ACCORDANCE WITH THE DEPARTMENT'S APPLICABLE RULES AND REGULATIONS. GRANTEE FURTHER UNDERSTANDS AND AGREES THAT THE FAILURE TO OBTAIN SUCH PERMIT SHALL RESULT IN THE FORCIBLE REMOVAL BY THE DEPARTMENT OF ANY FACILITIES THAT MAY BE CONSTRUCTED OR INSTALLED WITHIN THE RIGHT-OF-WAY.

5. In clearing the right-of-way, Grantee agrees to dispose of brush and other debris so as not to interfere with the movement of livestock of state agriculture lessees.
6. All pipelines placed on said lands by virtue of this grant shall be buried not less than twenty inches (20") deep. An exception to this requirement may be granted on other than agricultural lands when hard rock is encountered which would require blasting, or when a temporary pipeline is necessary and will not unduly hamper other surface uses. Deviation of the twenty-inch depth must be shown on the plat accompanying the application for right-of-way or by the filing of an amended plat upon completion of construction.
7. Grantee hereby agrees to carefully avoid destruction or injury to any improvements or livestock lawfully upon the premises described herein, to close all gates immediately upon passing through same, and to pay promptly the reasonable and just damages for any injury or destruction arising from construction or maintenance of this right-of-way.
8. Grantee shall not assign this right-of-way without the prior written approval of Grantor, which shall not be unreasonably withheld. Such approval may be conditioned upon the agreement by Grantee's assignee to additional conditions and covenants and may require payment of additional compensation to Grantor. This right-of-way is for the sole purpose stated and no other. Grantee agrees not to sell or otherwise grant to any person or entity any interest therein or the right to use any portion thereof.
9. The rights granted herein are subject to valid existing rights.
10. Grantor reserves the right to execute leases for oil and gas, coal, and minerals of whatsoever kind and for geothermal resources development and operation, the right to sell or dispose of same and the right to grant rights-of-way and easements related to such leasing.
11. In all matter affecting the premises described herein or operations thereon, Grantee, its employees, agents and contractors shall, at their own expense, fully comply with all laws, regulations, rules, ordinances, and requirements of any governmental authority or agency, which may be enacted or promulgated, including, but not limited to, requirements or enactments pertaining to conservation, sanitation, aesthetics, pollution, cultural properties, fire, or ecology, including those provisions of the New Mexico Cultural Properties Act, §§18-6-1 through 17, NMSA 1978, that attach criminal penalties to the appropriation, excavation, injury or destruction of any site or object of historical, archaeological, architectural, or scientific value located on state lands. In addition, Grantee, its employees, agents and contractors must comply with the provisions of the Pipeline Safety Act, §§ 70-3-11 through 20, NMSA 1978, and rules enacted pursuant to the Act, and agree to provide the Public Regulation Commission access to records of compliance.

Non-use of the right-of-way granted herein for any period in excess of one (1) year without the prior written consent of Grantor shall be conclusive proof of abandonment of the right-of-way, and shall cause the right-of-way to lapse *ipso facto* and revert to Grantor without further action or notice required of Grantor; and non-use for shorter periods shall place upon grantee the burden of providing that there was no intent to abandon. Grantee's abandonment cannot be waived by any action or inaction of Grantor or by Grantor's failure to discover such abandonment. The resumption of use by Grantee after abandonment shall be deemed a trespass. Grantee, if other than a governmental entity that is provided

2012 AUG 29 PM 8:19

immunity from suit by the New Mexico Tort Claims Act, agrees to save and hold harmless, defend and indemnify the State of New Mexico, the Commissioner of Public Lands, and his agents or employees, in their official and individual capacities, of and from any and all liability, claims, losses, or damages arising out of or alleged to arise out of or indirectly connected with the operations of Grantee, its employees, agents, or contractors hereunder; provided however that such claims, losses, or damages are not caused by the negligence or willful misconduct of Grantor.

12. Notwithstanding anything contained herein, Grantor may cancel this grant for violation of any of the covenants of this agreement; provided, however, that before any such cancellation shall become effective, Grantor shall mail to grantee or any approved assignee, by certified mail addressed to the post office address of Grantee or such assignee shown by Land Office records, a sixty (60) day notice of intention to cancel, specifying the default for which the grant is subject to cancellation. No proof of receipt of notice shall be necessary and sixty (60) days after such mailing, Grantor may enter cancellation unless Grantee shall have sooner remedied the default to the satisfaction of Grantor.
13. Grantee agrees to preserve and protect the natural environmental conditions of the land encompassed in this grant, and to take those reclamation or corrective actions that are accepted soil and water conservation practices and that are deemed necessary by Grantor to protect the land from pollution, erosion, or other environmental degradation.
14. Grantee agrees to reclaim by grading, leveling, or terracing all areas disturbed by the construction or maintenance of the right-of-way or operations thereon and to landscape such areas at its own cost and expense. Landscaping shall include the planting of native grasses, shrubs, or other vegetation so as to return disturbed areas to their natural state and prevent water and wind erosion.
15. This grant shall become effective upon its execution by Grantor.

Stipulation: * An additional temporary 70' in width has been granted under the terms of this right of way grant for construction purposes only and will revert back to its original state and to the State Land Office upon completion of the project.

(4)

Right-of-Way Easement No. RW-32965

GRANTEE:

By: Brenda R Linstev
Attorney-in-fact

ACKNOWLEDGMENT

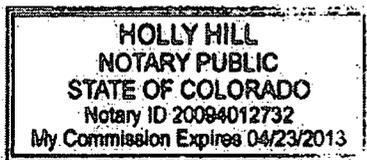
STATE OF Colorado)
) ss.
COUNTY OF Denver)

The foregoing instrument was acknowledged before me this 20th day of August, 2012,
by Brenda R Linstev of Ecana Oil & Gas (USA) Inc. a
Delaware corporation, on behalf of said corporation.

My Commission Expires:

April 23 2013

Holly Hill
NOTARY PUBLIC



STATE OF NEW MEXICO

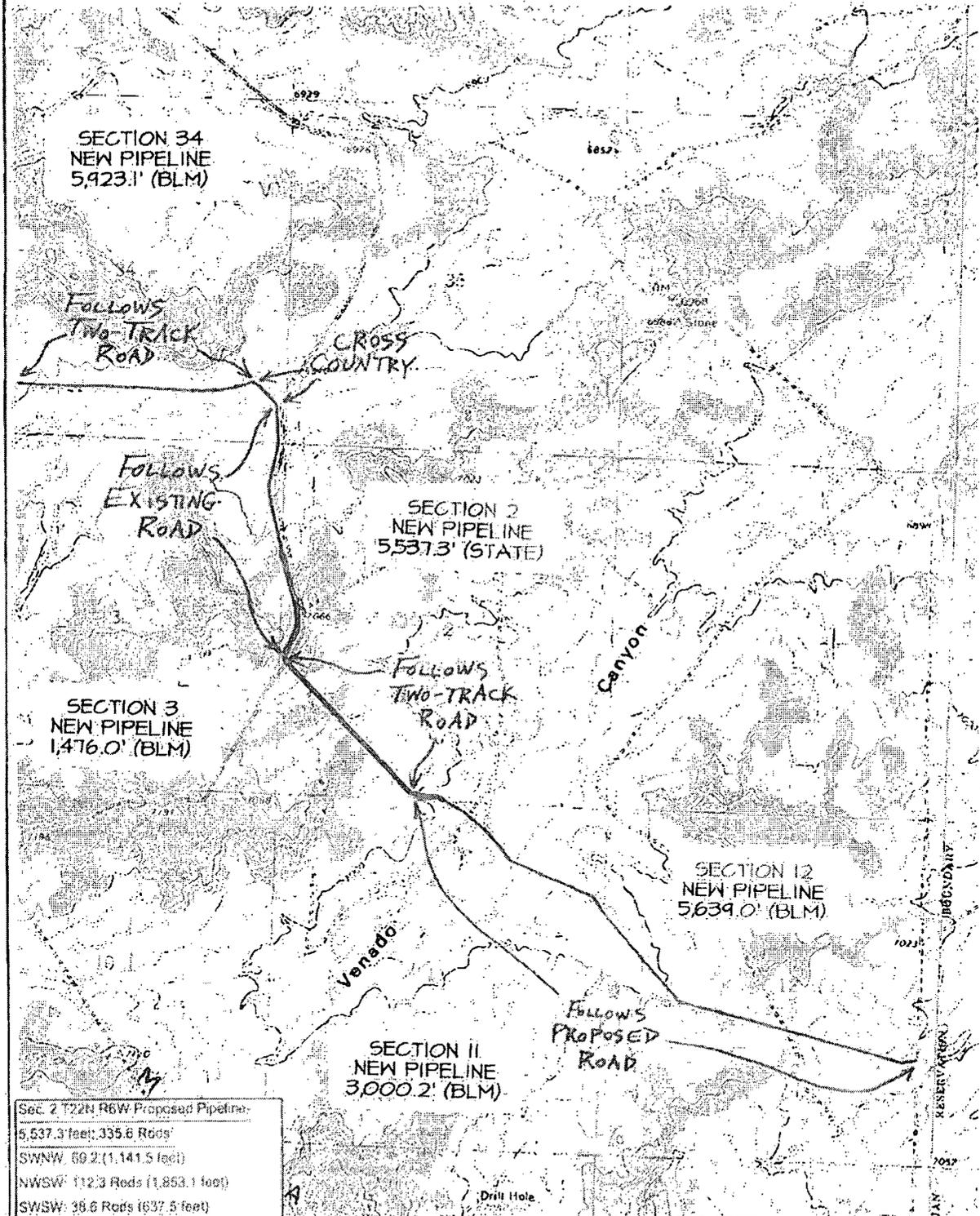
BY: Ray Powell
Ray Powell, M.S., D.V.M.
Commissioner of Public Lands

DATE: 8/30/12

S
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A
L

Exhibit 'A'

ENCANA OIL & GAS (USA) INC. LYBROOK TRUNK #1 PIPELINE
 SECTIONS 2, 3, 11 & 12, T22N, R6W & SECTION 34, T23N, R6W, N.M.P.M.
 SANDOVAL COUNTY, NEW MEXICO



Sec. 2 T22N R6W Proposed Pipeline:	
5,537.3 feet:	335.6 Rods
SWNW: 69.2:	(1,141.5 feet)
NWSW: 112.3 Rods:	(1,853.1 feet)
SWSW: 38.6 Rods:	(637.5 feet)
SESW: 108.0 Rods:	(1,797.9 feet)
SWSE: 6.5 Rods:	(107.3 feet)

NAME OF TOPO : COUNSELOR

Exhibit A-3 to Application for Right-of-Way Easement for Section 2 T22N R6W

Rods and Feet Per Quarter Quarter		
Qtr/Qtr	Feet	Rods
SWNW	1141.47	69.18
NWSW	1853.11	112.3097
SWSW	637.53	38.63818
SESW	1797.91	108.9642
SWSE	107.34	6.505455
TOTAL	5537.36	335.5976



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: SJ 00681 11
Primary Purpose: STK 72-12-1 LIVESTOCK WATERING
Primary Status: DCL DECLARATION
Total Acres: 0
Total Diversion: 8
Owner: HOMER C. BERRY

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
 get images	293497	DCL	1976-12-10	DCL	PRC	SJ 00681 11	T	0	8

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Source	Q	Q	Q	X	Y	Other Location Desc
<u>SJ 00681 11</u>	64 16 4	1	2	11	22N 06W	280879	4004203*

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
12/10/1976	DCL	0	8	<u>SJ 00681 11</u>	

Place of Use

Q	Q	Q	Q	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4	0	8		STK		DCL	NO PLACE OF USE GIVEN

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	8		STK		GW

Attachment 3

C-138

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-138
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Encana Oil & Gas (USA) Inc. 370 17 th Street, Suite 1700 Denver, CO 80202
2. Originating Site: Lybrook Trunkline – Hydrostatic Test Dewatering Site API: N/A- New Gathering Line
3. Location of Material (Street Address, City, State or ULSTR): SESW Sec2, T22N, R6W Sandoval County, NM NAD83: Lat 36.1593°N Long 107.43868°W
4. Source and Description of Waste: Hydrostatic Test water from new construction of gathering lines Encana Oil & Gas (USA) Inc. authorizes Basin Disposal to complete the Generator 19.15.36.15 Waste Testing Certification Statement. Estimated Volume <u>575</u> yd ³ / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd ³ / bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I, _____, Kirsten Derr, representative or authorized agent for Encana Oil & Gas (USA) Inc. do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification) <input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. <u>Operator Use Only</u> <u>Waste Acceptance Frequency</u> <input checked="" type="checkbox"/> <u>Monthly</u> <input type="checkbox"/> <u>Weekly</u> <input type="checkbox"/> <u>Per Load</u> <input type="checkbox"/> RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items) <input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
5. Transporter: Various

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Basin Disposal #NM-01-0005

Address of Facility: Bloomfield, New Mexico

Method of Treatment and/or Disposal:

Evaporation Injection Treating Plant Landfarm Landfill Other

Waste Acceptance Status:

APPROVED

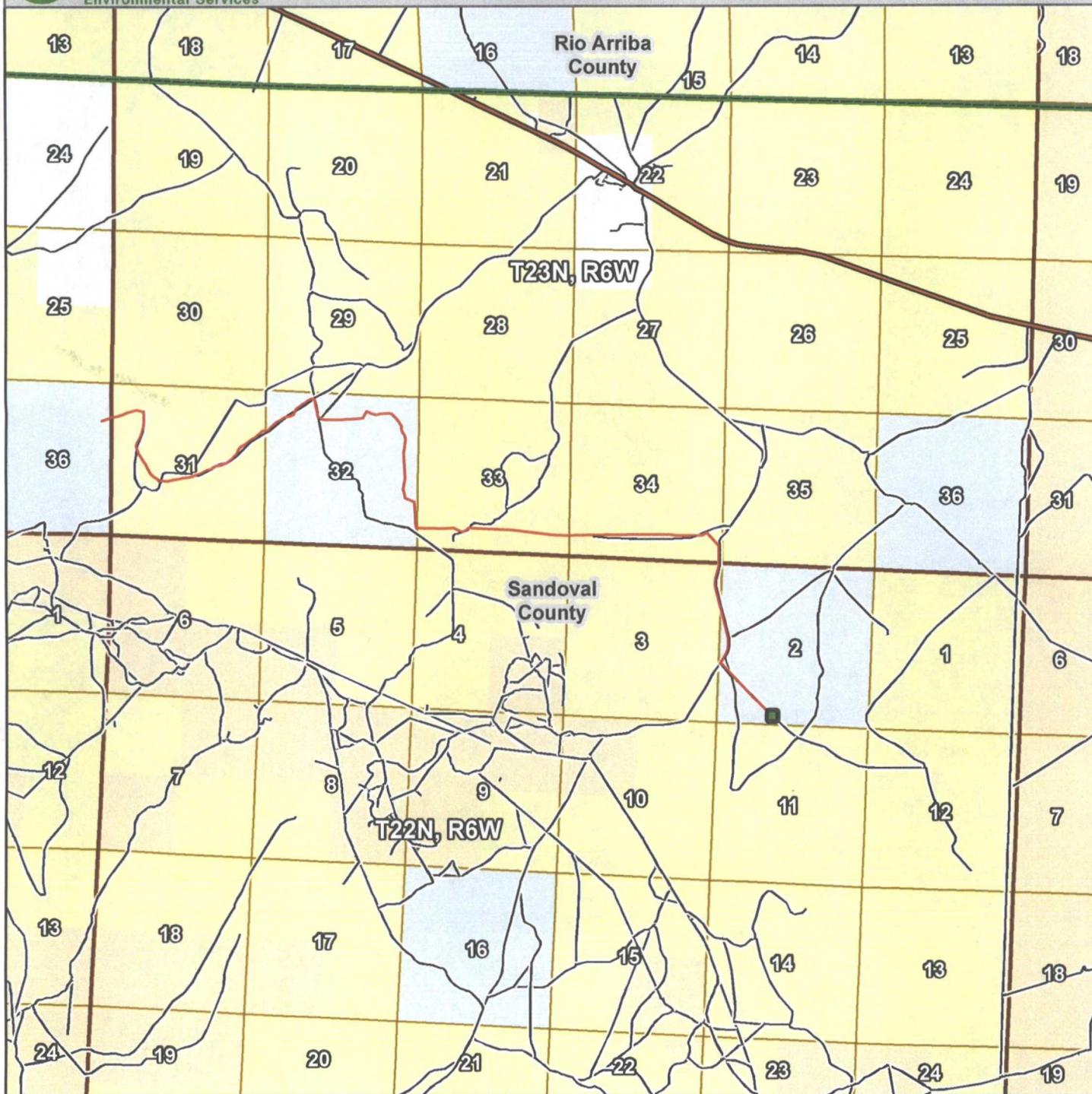
DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: _____ DATE: _____

SIGNATURE: _____ TELEPHONE NO.: _____

Surface Waste Management Facility Authorized Agent

Figures



Legend

- Dewatering Location
- Lybrook Trunk 1 Pipeline
- Highway
- Minor Road
- Townships
- Sections
- County Boundary



1:60,000

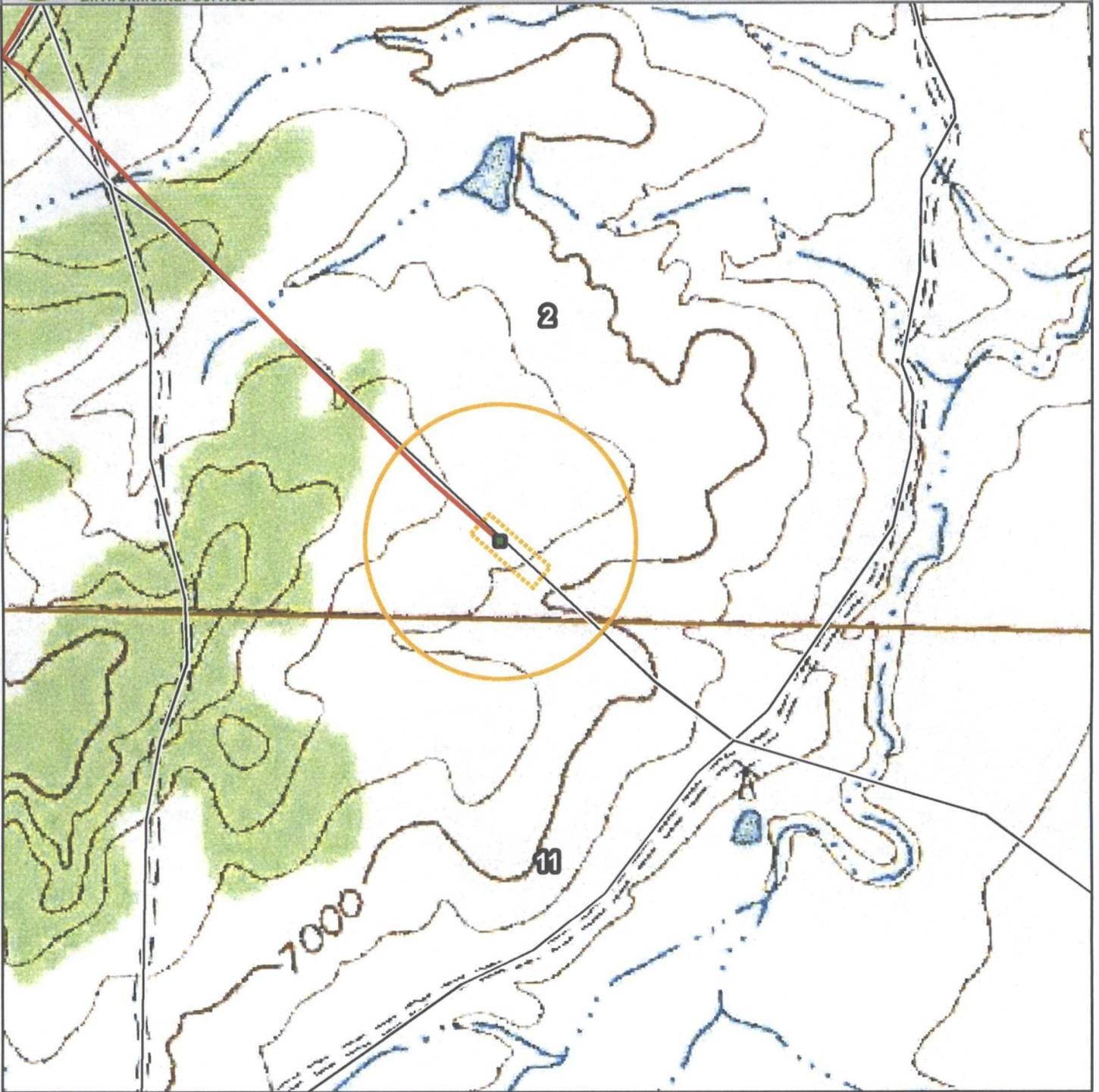
Coordinate System: NAD 1983 UTM Zone 13N

**LYBROOK TRUNK #1
PIPELINE**

REGIONAL MAP

FIGURE 1

Date: 4/11/2013

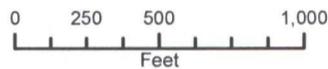


Legend

-  Dewatering Location
-  500 Foot Buffer
-  Lybrook Trunk 1 Pipeline
-  Easement
-  Minor Road
-  Sections



1:8,000

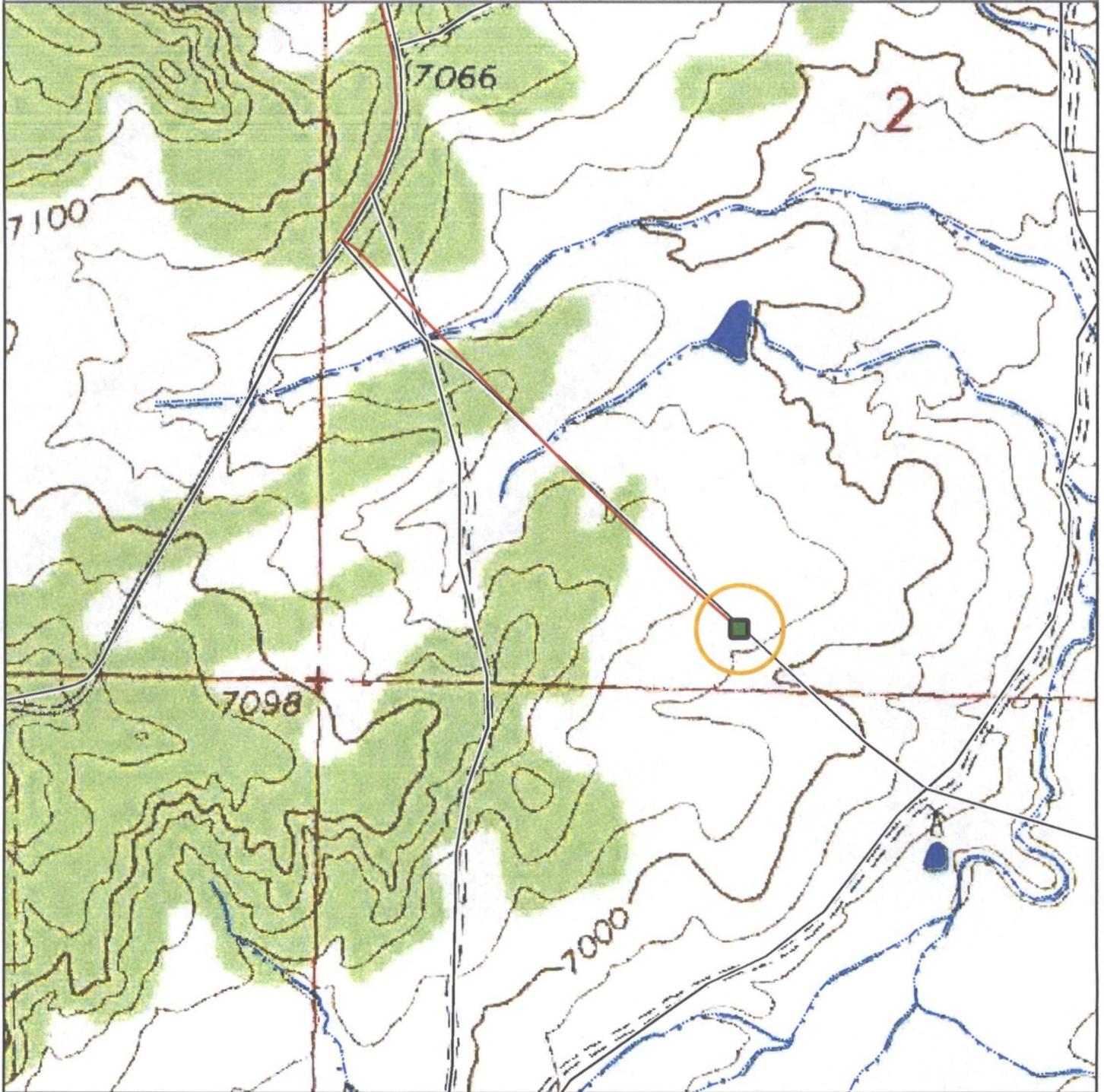


**LYBROOK TRUNK #1
PIPELINE**

SITE SPECIFIC MAP

FIGURE 2

Date: 4/12/2013

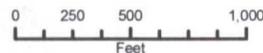


Legend

- Dewater Location
- 200 Foot Buffer
- Lybrook Trunk 1 Pipeline
- Artificial Path
- Canal
- Intermittent Stream
- Perennial Stream/River
- Pipeline
- Lake/Pond
- Playa
- Swamp/Marsh
- Sink



1:10,000



**LYBROOK TRUNK #1
PIPELINE**

PROXIMITY TO WATER
BODIES MAP

FIGURE 3

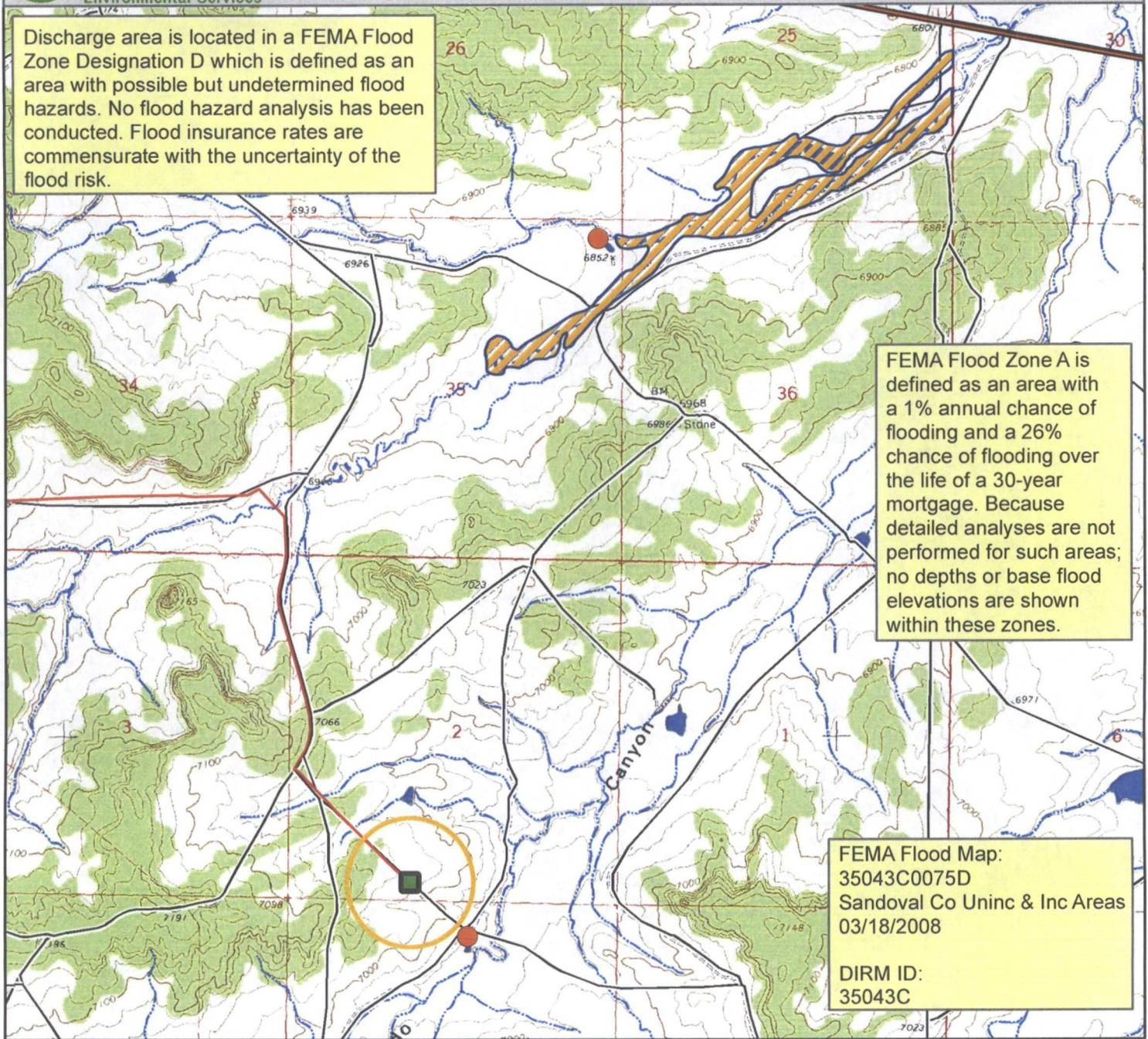
Date: 4/12/2013

Discharge area is located in a FEMA Flood Zone D which is defined as an area with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

FEMA Flood Zone A is defined as an area with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.

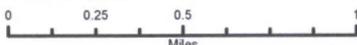
FEMA Flood Map:
35043C0075D
Sandoval Co Uninc & Inc Areas
03/18/2008

DIRM ID:
35043C



Legend

- Dewater Location
- 1000 Foot Buffer
- FEMA Floodzone A
- FEMA Floodzone D
- Water Point of Discharge Use Type**
- Domestic One Household
- Highway Construction
- Livestock Watering
- Lybrook Trunk 1 Pipeline
- Highway/Major Road
- Minor Road
- Local Road
- Sink
- Gaging Station
- Spring/Seep
- Waterfall
- Well
- Lake/Pond
- Playa
- Swamp/Marsh
- Artificial Path
- Canal
- Intermittent Stream
- Perennial Stream/River
- Pipeline



Coordinate System: NAD 1983 UTM Zone 13N

**LYBROOK TRUNK #1
PIPELINE**

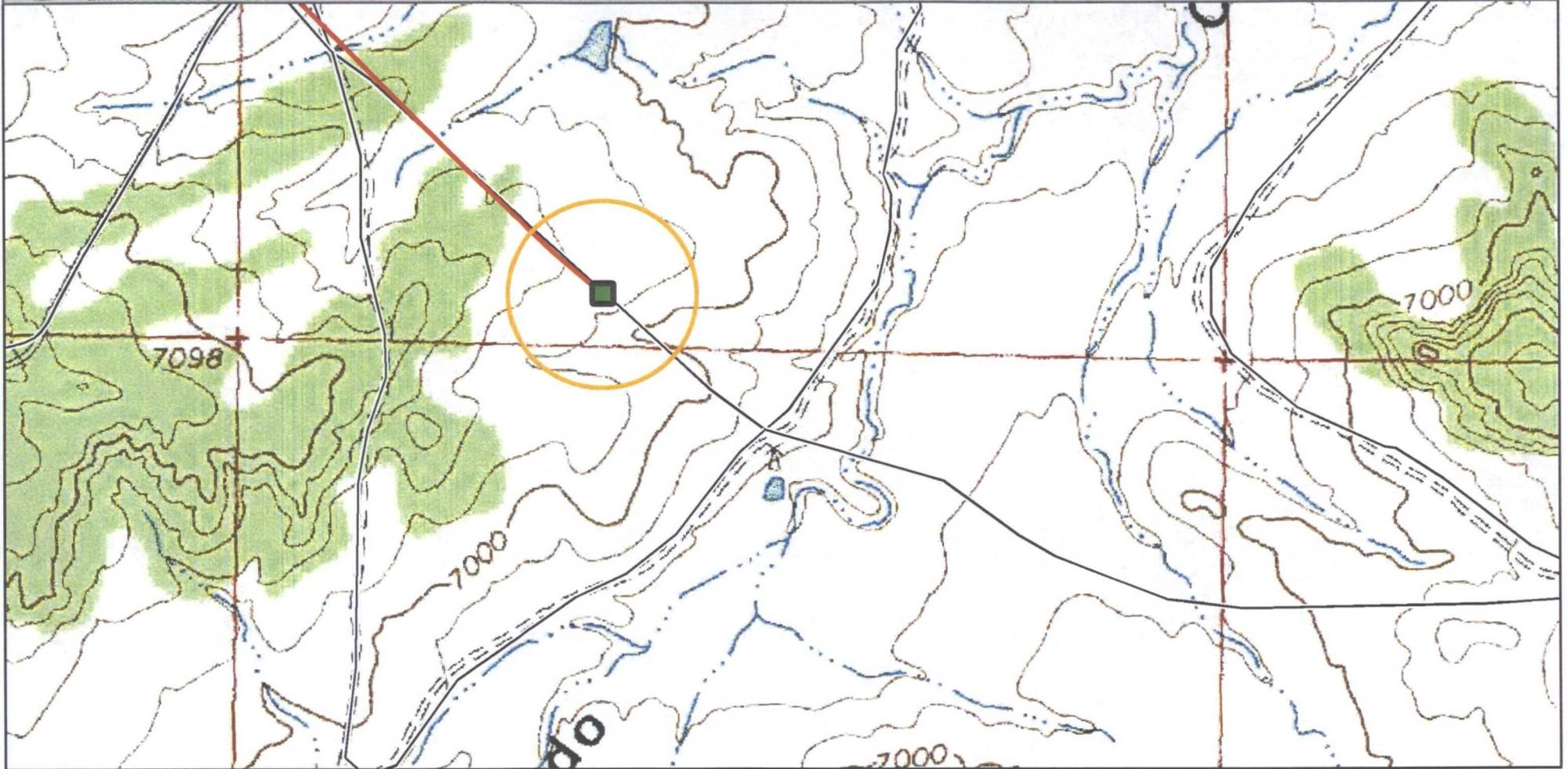
WELL HEAD PROTECTION
AREA OR 100 YEAR
FLOODPLAIN MAP

FIGURE 4



1:35,000

Date: 4/12/2013



Legend

- Dewater Location
- 500 Foot Buffer
- Lybrook Trunk 1 Pipeline
- Minor Road

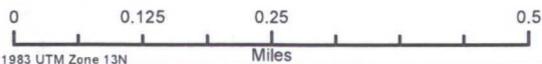
USFWS - Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine



1:12,000



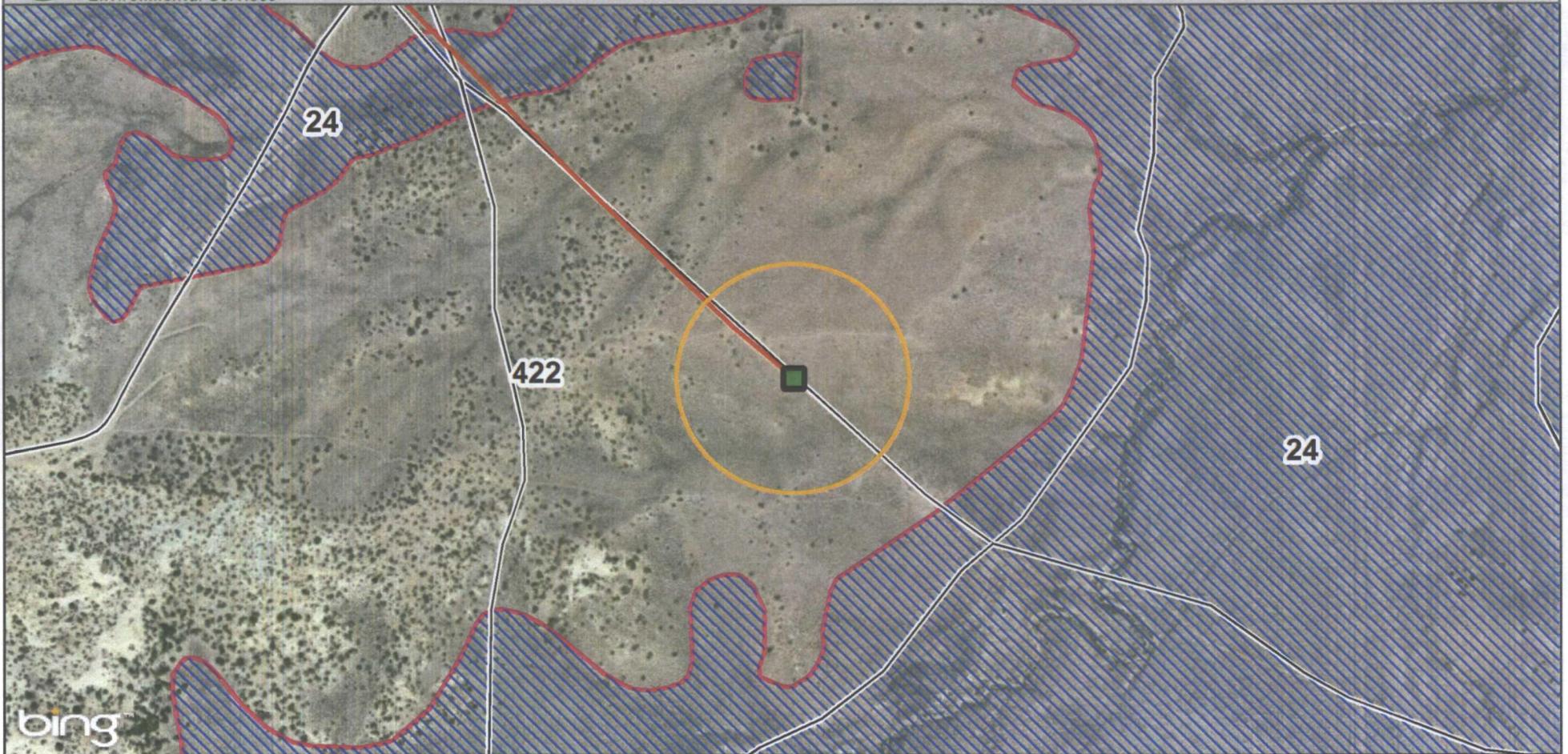
Coordinate System: NAD 1983 UTM Zone 13N

**LYBROOK TRUNK #1
PIPELINE**

WETLANDS MAP

FIGURE 5

Date: 4/12/2013



Legend

- Dewater Location
- 500 Foot Buffer
- Lybrook Trunk 1 Pipeline
- Minor Road

Soil Type

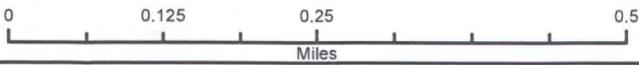
- 24 - Orlie-Sparham association
- 422 - Vessilla-Menefee-Orlie association

Hydic Soils

- Partially Hydric



1:10,000



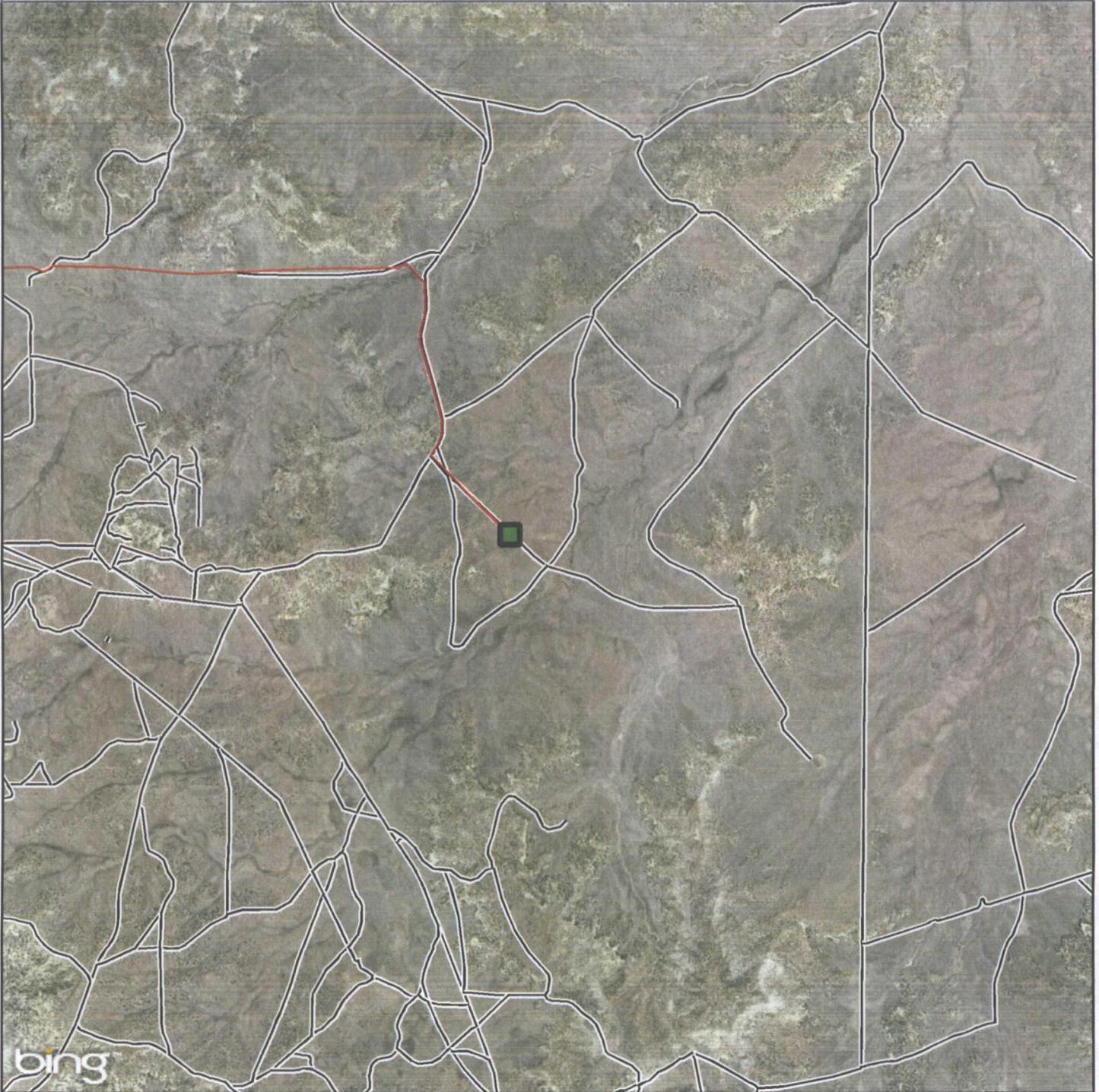
Coordinate System: NAD 1983 UTM Zone 13N

**LYBROOK TRUNK #1
PIPELINE**

SOILS MAP

FIGURE 6

Date: 4/12/2013



Legend

-  Dewater Location
-  Lybrook Trunk 1 Pipeline
-  Minor Road



1:50,000



Coordinate System: NAD 1983 UTM Zone 13N

**LYBROOK TRUNK #1
PIPELINE**

SUBSURFACE MINES MAP

FIGURE 7

Date: 4/12/2013



- Legend**
- Dewater Location
 - 500 Foot Buffer
 - Lybrook Trunk 1 Pipeline
 - Minor Road



1:5,000



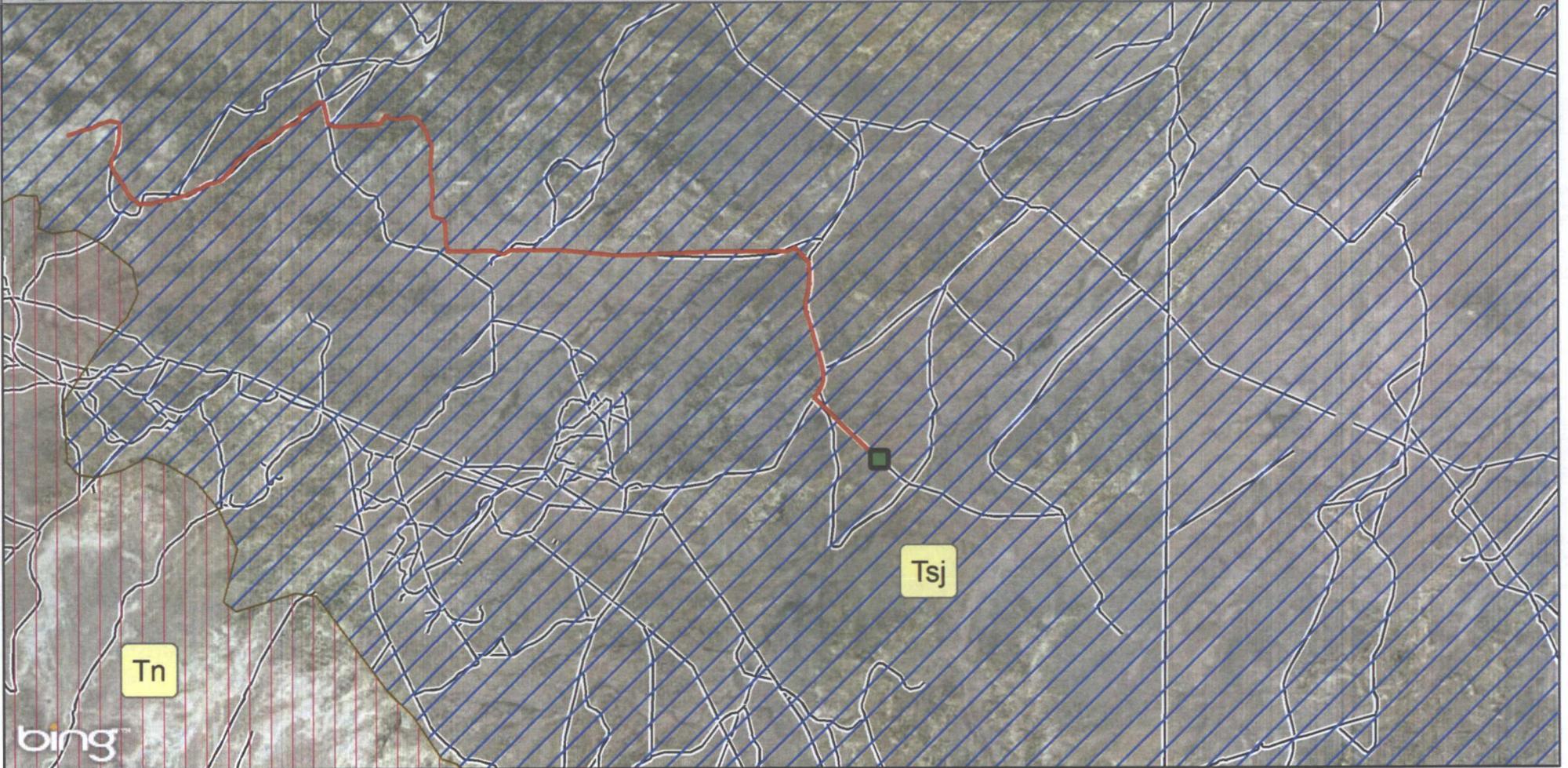
Coordinate System: NAD 1983 UTM Zone 13N

**LYBROOK TRUNK #1
PIPELINE**

RESIDENCE, SCHOOLS,
HOSPITALS,
INSTITUTIONS, &
CHURCHES MAP

FIGURE 8

Date: 4/12/2013



Legend

-  Dewater Location
-  Lybrook Trunk 1 Pipeline

Geology

-  Tn - Nacimiento Formation; Paleocene, San Juan Basin
-  Tsj - San Jose Formation; Eocene, San Juan Basin

Coordinate System: NAD 1983 UTM Zone 13N



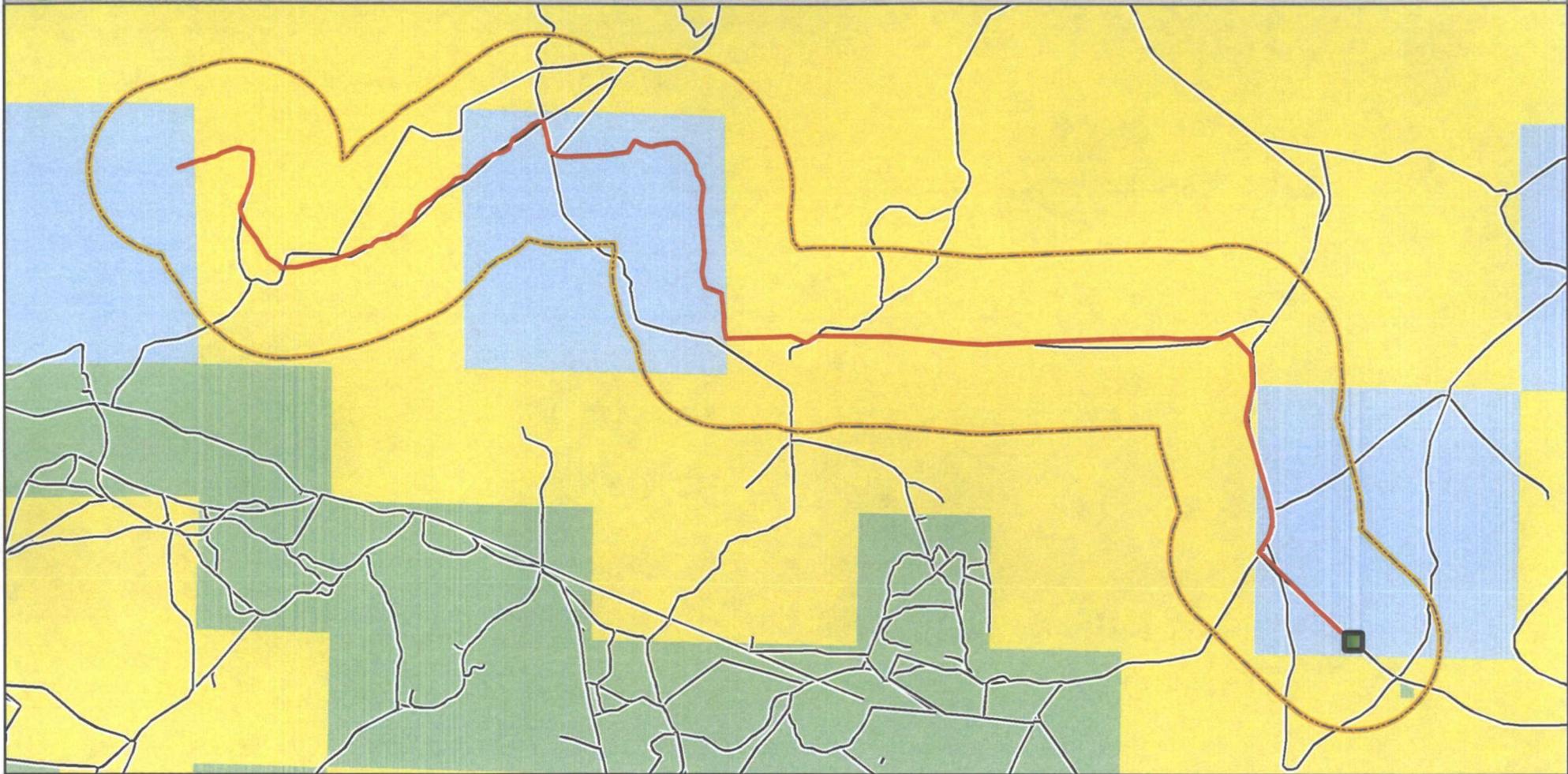
1:65,000

**LYBROOK TRUNK #1
PIPELINE**

GEOLOGY MAP

FIGURE 9

Date: 4/12/2013



Legend

-  Dewater Location
-  Lybrook Trunk 1 Pipeline
-  1/3 Mile Pipeline Buffer
-  Highway
-  Minor Road

Surface Ownership

-  Bureau of Land Management
-  State
-  Tribal



1:45,000



Coordinate System: NAD 1983 UTM Zone 13N

**LYBROOK TRUNK #1
PIPELINE**

SURFACE OWNERSHIP MAP

FIGURE 10

Date: 4/12/2013

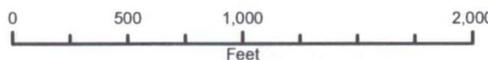


Legend

- Dewatering Location
 - Easement
 - Minor Road
- Surface Ownership**
- Bureau of Land Management
 - State
 - Tribal



1:10,000



Coordinate System: NAD 1983 UTM Zone 13N

**LYBROOK TRUNK #1
PIPELINE**

SITE SPECIFIC MAP

FIGURE 2

Date: 4/12/2013