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1RP - 2652

CONOCOPHILLIPS COMPANY

7/26/2016

REMEDIATION CLOSURE REPORT

MCA 4-B HEADER RELEASE AREA

NMOCD #1RP-11-10-2652
EPI REF: 150029

UL-N (SE¼ OF THE NW¼) OF SECTION 23 T17S R32E
~3.1 MILES SOUTHEAST OF MALJAMAR,
LEA COUNTY, NEW MEXICO
LATITUDE: N 32° 48' 07.46" LONGITUDE: W 103° 28' 33.70"

APRIL 2012

PREPARED BY:

ENVIRONMENTAL PLUS, INC.
2100 AVENUE O
P.O. BOX 1558
EUNICE, NEW MEXICO 88231

PREPARED FOR:

ConocoPhillips

26 April 2012

Mr. Geoffrey Leking
Environmental Engineer
New Mexico Oil Conservation Division
1265 North French Drive
Hobbs, New Mexico 88240

RE: Remediation Closure Report – MCA 4-B Header Release Area
ConocoPhillips Corporation
UL-N (SE1/4 of the SW1/4) of Section 23, T 17S, R 32 E
Lea County, New Mexico
Latitude: 32° 48' 07.46"; Longitude: 103°28' 33.70"
NMOCD Ref. #1RP-11-10-2652; EPI Ref. #150029

Dear Mr. Leking:

The below *Remediation Closure Report* (*Report*) is an abbreviated version depicting prominent remedial activities conducted on the above referenced Release Area. However, for clarity and cross reference elimination purposes the *Report* includes *Release History*, *Site Background*, *Preliminary Field Work*, *Analytical Data and Procedures* and *Field Remediation Activities*.

Release History

Initial release occurred on July 13, 2010 at 10:00 am when approximately 16.3-barrels of petroleum product (16.3 barrels - oil and 0.0 barrels - water) covering a release area of ±9,180 square feet (s.f.) were released when a compression fitting separated on a four (4) inch diameter asbestos cement surface flow line. A vacuum truck deployed to the release area recovered 12-barrels of crude oil.

A secondary release occurred on February 6, 2011 at an unknown time and volume from the same four (4) inch diameter asbestos cement surface flow line covering a release area of ±7,500 square feet. Approximately 60-barrels of free standing petroleum products were recovered (48 barrels – oil and 12 barrels – water). On February 7, 2011 an additional 35 barrels of fluids were recovered and transported to Sundance Services, Inc., for disposal. On February 10, 2011 a vacuum truck collected an additional 66-barrels of solids and transported to Sundance Services for disposal.

Site Background

The site is located in UL-N (SE1/4 of the SW1/4) of Section 23, T17S, R32E at an approximate elevation of 3,997 feet above mean sea level (amsl). The property is owned by the Department of the Interior and managed by the Bureau of Land Management (BLM). A search for water wells was completed utilizing the *New Mexico Office of the State Engineers* website and a database maintained by the United States Geological Survey (USGS). No wells (domestic, agriculture or

public) or bodies of surface water exist within a 1,000-feet radius of the Site. Ground water data indicated average depth to water is approximately 55-60 feet below ground surface (bgs). Based on field data acquired via soil borings (12-15-11), vertical distance between impacted soil and groundwater is approximately 10-15 feet. Utilizing this information, New Mexico Oil Conservation Division Remedial Threshold Goals (NMOCD Goals) were determined as follows:

Parameter	Remedial Goal
Benzene	10 mg/Kg
BTEX	50 mg/Kg
TPH	100 mg/Kg
Chlorides	250 mg/Kg

Preliminary Field Work

EPI responded to the initial spill which occurred on July 13, 2010 from a four (4) inch diameter asbestos cement surface flow line. Approximately 16.3-bbls of petroleum products were released with 12-bbls recovered. On September 8, 2010 EPI advanced ten (10) hand auger soil borings within the release area. If possible, hand auger soil borings were advanced to a depth where two (2) consecutive soil samples were below NMOCD Goals for TPH (100 mg/Kg) and chloride (250 mg/Kg) concentrations. Based on soil sample laboratory analytical results, EPI developed a *Remediation Proposal* and presented it to the NMOCD on September 27, 2010. However, prior to commencement of remedial activities a second release occurred on the same pipeline and area on February 6, 2011.

On March 4, 2011 EPI mobilized labor and equipment to the Site. From March 4-18, 2011 EPI excavated and transported approximately 518-cubic yards of petroleum contaminated soil to Controlled Recovery, Incorporated (CRI) for disposal. As the release area was on sandy soil located in a depression surrounded by sand dunes, removal of petroleum contaminated soil as directed by BLM representative was a precautionary measure for limiting vertical and horizontal migration of contaminants. In an effort to delineate vertical depth and horizon limits of impacted material, six (6) test trenches were excavated on March 16, 2011. Fourteen (14) soil samples were collected from the six (6) test trenches, three (3) sidewalls and one (1) original sand hill. Soil samples were collected a various depths, field tested and remitted to an independent laboratory for analyses of TPH and chloride concentrations (Ref. *Figure 4* for location and *Table 3* for analytical results).

On April 28, 2011 EPI again mobilized labor and equipment to the release area and transported 28-cubic yards of impacted material to CRI. In addition, soil samples were collected at test trenche locales determined by BLM and NMOCD representatives. Thirteen (13) soil samples were collected at locales exhibiting elevated TPH and/or chloride concentrations greater than NMOCD Goals, but at different vertical depths and/or extended horizontal limits. As collected soil samples were destined for laboratory analyses only, no field tests were conducted. All thirteen (13) soil samples indicated TPH concentrations either non-detect (ND) or at limits below

NMOCD Goals of 100 mg/Kg. However, all six (6) soil samples analyzed for chloride concentrations were elevated above NMOCD Goals of 250 mg/Kg (Ref. *Figure 4* for locations and *Table 3* for analytical results).

Analytical Data and Procedures

Soil samples collected for Field and Laboratory Analyses on dates listed in the above referenced *Preliminary Field Work* and subsequent *Field Remediation Activities* sections are included in Tables 2, *Hand Auger Analytical Data*, Table 3, *Excavation Analytical Data* and Table 4, *Soil Borings Analytical Data*. Due to the voluminous nature of soil sample analytical data, individual testing results will be expounded to highlight major "areas of concern". Otherwise, specific Tables will be referenced for analytical results.

A portion of select soil samples were field tested for organic vapors and in several instances for chloride concentrations. Soil samples collected for field testing of organic vapors were placed in self sealing polyethylene bags and allowed to equilibrate to ~70° F. Soil samples were then tested for organic vapors utilizing a MiniRae™ Photoionization Detector (PID) equipped with a 10.6 electron-volt (eV) lamp calibrated for benzene response. Chloride concentrations were determined via use of a LaMotte Chloride Kit (Titration Method).

Soil samples designated for laboratory analyses were immediately inserted into laboratory provided containers, labeled, placed in coolers, iced down and transported to an independent laboratory for quantification of TPH [Gasoline Range Organics (C6-C12), Diesel Range Organics (>C12-C28) and Oil Range Organics (>C28-C35)] and chloride concentrations under Chain-of-Custody protocol..

Field Remediation Activities

Following approval of the *Remediation Proposal* by NMOCD and BLM, EPI remobilized to the site on October 28, 2011 to begin remedial activities. Due to previous agreement with the BLM, ingress/egress road was limited in width and depth to prevent additional damage to the environment. Excavated impacted material was transported to a designated stockpile area near an existing caliche lease road via front end loaders. From October 28 through November 18, 2011, approximately 1,846 cubic yards of impacted material was excavated and transported to CRI.

In an effort to determine depth of impacted soil, EPI mobilized to the site on November 28, 2011 and attempted to delineate the area via hand auger methods. As this effort proved to no avail, a trackhoe was used to dig a sample trench to a depth of ±17-vertical feet below bottom of existing excavation. Six (6) soil samples were collected from the sidewalls and bottom of the sample trench. Field analyses of the soil samples indicated chloride concentrations elevated above NMOCD Goals of 250 mg/Kg.

After consultation with representatives of ConocoPhillips, BLM and NMOCD, it was concluded soil borings were the practical means of determining depth of impacted material. From November 29 through December 14, 2011, the south end of the excavation was prepared for soil boring activities. Bottom of excavation was leveled using in-situ material and compacted with a trackhoe. Approximately 134 cubic yards of imported clay (Wallach Concrete, Eunice, New Mexico) was used to build a minimum two (2) feet thick barrier over the bottom of the

excavation. Compaction was achieved via use of the trackhoe steel tracks. Once the clay barrier was in place and compacted, the excavation was backfilled with caliche to within five (5) feet of original ground surface. During this activity approximately 497 cubic yards of imported caliche were used. To aid in achieving density suitable for supporting a drill rig, the caliche was watered and rolled by the trackhoe. Similarly, ingress/egress road and turnaround areas were improved for accessibility of the drilling rig.

On December 15, 2011 a drilling rig (White Drilling, Clyde, Texas) mobilized to the job site and drilled one (1) each soil boring on the south and north ends of the southerly excavation (Ref. *Figure #5* for locations). Soil samples were collected and field tested at five (5) feet increments until either soil free of impacts or groundwater was encountered. However, as the sample trench indicated soil was impacted to approximately twenty-five (25) feet bgs, the first soil sample was collected at thirty (30) feet bgs. In noting Table #4, non-impacted material was encountered at forty-five (45) feet bgs on the south and thirty-five (35) feet bgs on the north ends of the southerly excavation. Determining groundwater had not been impacted by the series of releases, final excavation of impacted material on the central and north areas was undertaken.

From January 3-12, 2012 efforts concentrated on backfilling the southerly excavation to within ten (10) horizontal feet of an earthen bridge supporting the flow lines. Approximately 1,658 cubic yards of sandy loam material was transported from the Caviness pit located on SH#529 to the project site. Material was stockpiled near the ingress/egress road and transported via front end loaders to the excavation site. Upon near completion of backfill operations, a roust-a-bout crew arrived on the job site on January 16, 2012 and rerouted the asbestos cement flow line into an existing steel one. Once the by-pass project was completed, excavation activities commenced on the interstice between the earthen bridge and backfilled section of the southerly excavation. Excavation was terminated horizontally at three (3) feet from the flow lines and vertically at a depth coincidental with the bottom of the southerly excavation.

On January 18, 2012 eleven (11) soil samples were collected from sidewalls and bottom of both the northerly and mid-sections of the excavation. Analytical results of the soil samples are noted in Table #3, *Field and Lab Analytical Data* with sample points noted on Figure #6. Basically Table #3 indicates the sidewalls of the earthen bridge are relatively free of impacted material above NMOCD Goals for TPH/Chloride concentrations with the exception of SW-9 (Chloride - 384 mg/Kg), SW-11 (Chloride - 320 mg/Kg) and NSW-1A (TPH - 490 mg/Kg and Chloride – 400 mg/Kg). Chloride concentrations in BH-5 (896 mg/Kg), BH-6 (1,680 mg/Kg) and BH-8 (4,080 mg/Kg) are elevated above NMOCD Goals. However, termination of the impacted zone is noted at thirty-five (35) feet bgs at a nearby locale.

Owing to ConocoPhillips excavation safety guidelines of remaining a minimum three (3) feet from buried active pipeline and prospects of shutting down production with removal of the pipelines located on the earthen bridge, a decision was made with all parties concerned (ConocoPhillips, NMOCD and BLM) to allow the earthen bridge remain "in situ". This decision to allow a limited "Risked Based Closure" requires ConocoPhillips to excavate the earthen bridge once the pipelines are permanently removed. Excavated impacted material will be transported to a State approved land farm. The excavation will be terminated whenever the depth is coincidental with the bottom of the northerly excavation section and laterally to sidewalls of the northerly and southerly excavations. A minimum two (2) feet thick compacted clay barrier will be constructed to isolate the excavation bottom. Remainder of the excavation will be

backfilled with sandy loam material terminating with existing surface elevation. Disturbed areas will be disced and deep drill seeded with a seed blend approved by the BLM.

On January 20, 2012 a roust-a-bout crew replaced the four (4) inch diameter asbestos cement flow line with a steel section tied into the asbestos cement line at both ends. The bottom of the southerly interstice area between the earthen bridge and previously backfilled area was lined with a minimum of two (2) feet of clay (±238 cubic yards) and compacted using a trackhoe. As the bottom of the northerly excavation was void of impacted material, no clay barrier was installed. Approximately 1,330-cubic yards of sandy loam soil were used to backfill the southerly and northerly excavations. Material used on the ingress/egress road was excavated and transported to CRI for disposal. The limited excavation areas were backfilled with sandy loam material from the Caviness pit. A berm was built at the intersection of the ingress/egress and main caliche lease road to prevent vehicular traffic trespass.

Remaining remedial activity is discing and deep drill seeding of the disturbed areas with a blend preferred by the BLM. However, owing to near drought conditions, it is recommended delaying this activity until soil and weather conditions are conducive to vegetative growth.

Should you have questions, concerns or need additional technical information, please contact me at (575) 394-3481 (office), (575) 441-7802 (cellular) or via e-mail at dduncanepi@gmail.com.

Official communications should be directed to Mr. John W. Gates at (575) 391-3158 (office), (575) 390-4821 (cellular) or via e-mail at John.W.Gates@conocophillips.com with correspondence addressed to:

Mr. John W. Gates
ConocoPhillips – HSER Lead
Permian-Buckeye Operations
29 Vacuum Complex Lane
Lovington, New Mexico 88260-9664

Sincerely,

ENVIRONMENTAL PLUS, INC.,

David P. Duncan
Civil Engineer
EPI Project Manager

Cc: John W. Gates, HSER Lead – ConocoPhillips Corporation
Ms. Trisha C. Bad Bear, Natural Resources Specialist – Bureau of Land Management
Justin Wright, Contract Person – ConocoPhillips Corporation
Cody Miller, General Manager – EPI
Roger Boone, Operations Manager – EPI

Encl: Figure 1 – Area Map
Figure 2 – Site Location Map
Figure 3 – Release Site Map
Figure 4 – Test Trench Location Map
Figure 5 – Soil Boring Map (12-15-11)
Figure 6 – Soil Sample Location Map
Table 2 – Hand Auger Analytical Data
Table 3 – Summary of Soil Sample Field Analyses and Laboratory Analytical Results
Table 4 – Soil Boring Analytical Data
Attachment I – Site Photographs
Attachment II – Laboratory Analytical Results and Chain-of-Custody Forms
Attachment III – Copy of Initial NMOCD Form C-141 (Amended)
Copy of Final NMOCD Form C-141

FIGURES

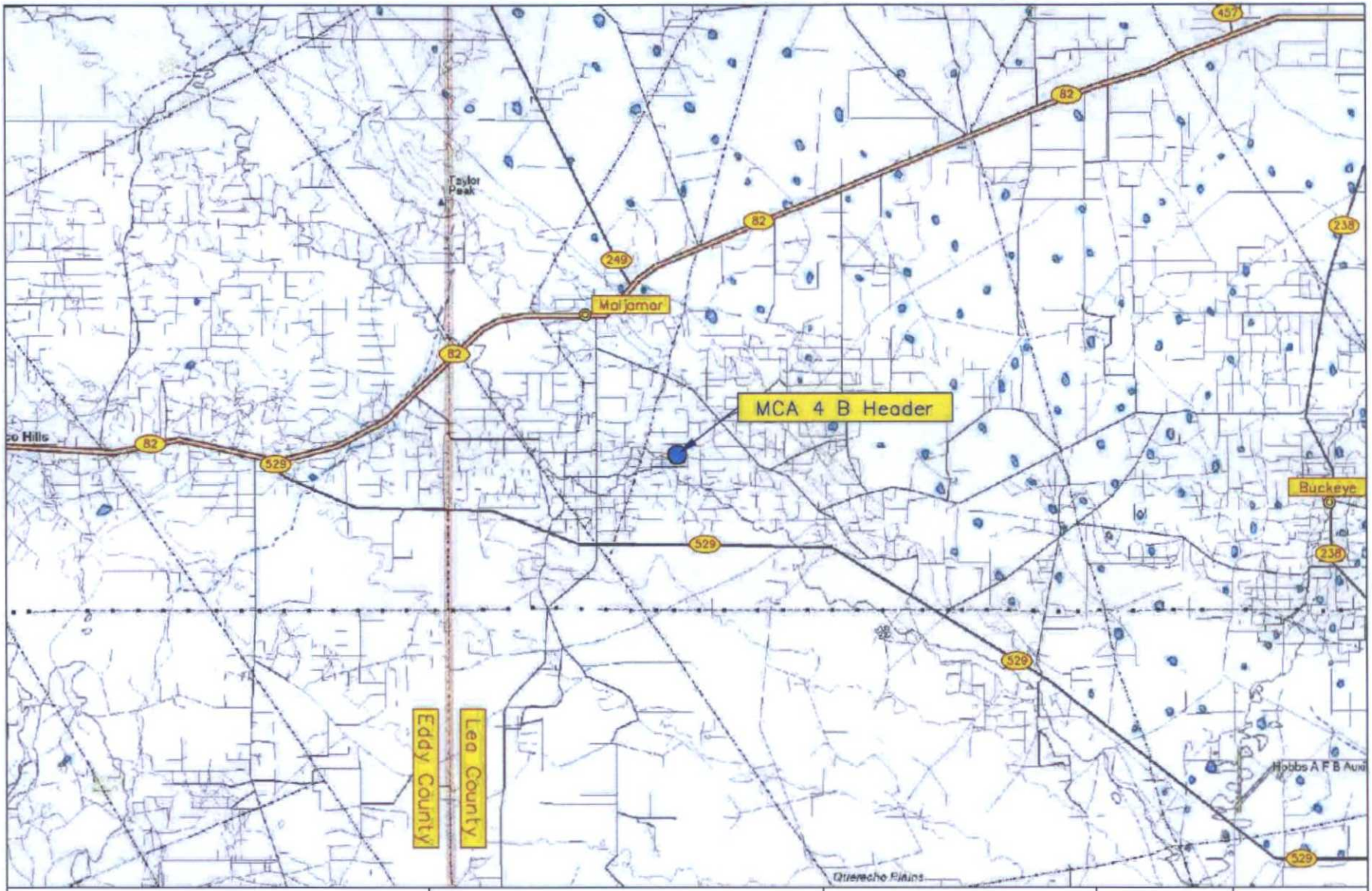

Figure 1 Area Map ConocoPhillips MCA 4–B Header	Lea County, New Mexico SW 1/4 of the SE 1/4, of Sec. 23, 17S, 32E N 32° 48' 55.11" W 103° 44' 03.63" Elevation: 4,002 feet amsl	DWG By: D Dominguez April 2012 0 3 6 Miles	REVISED: SHEET 1 of 1

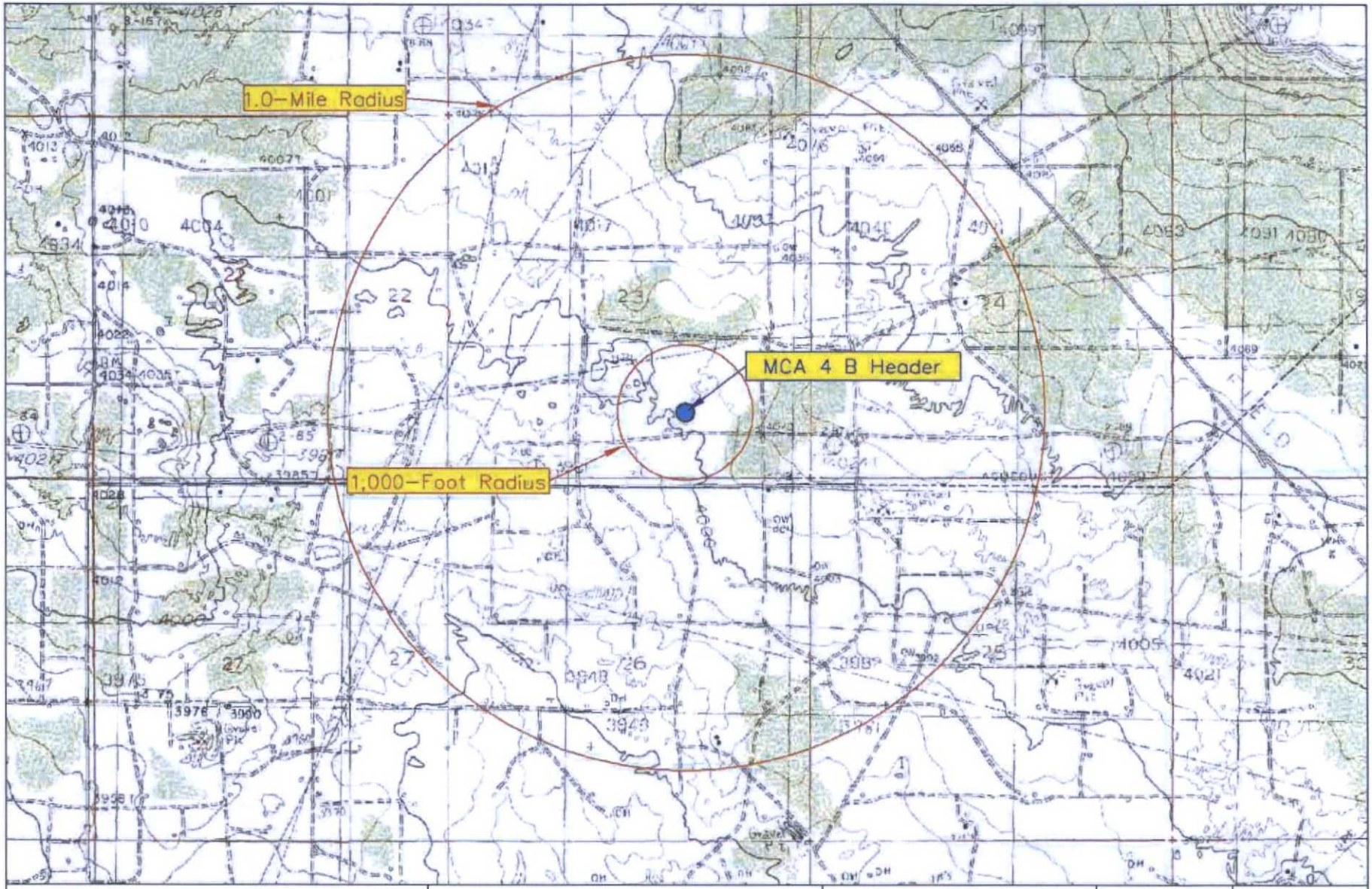

Figure 2
Site Location Map
ConocoPhillips
MCA 4-B Header

Lea County, New Mexico
SW 1/4 of the SE 1/4, of Sec. 23, 17S, 32E
N 32° 48' 55.11" W 103° 44' 03.63"
Elevation: 4,002 feet amsl

DWG By: D Dominguez
April 2012

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SHEET
1 of 1

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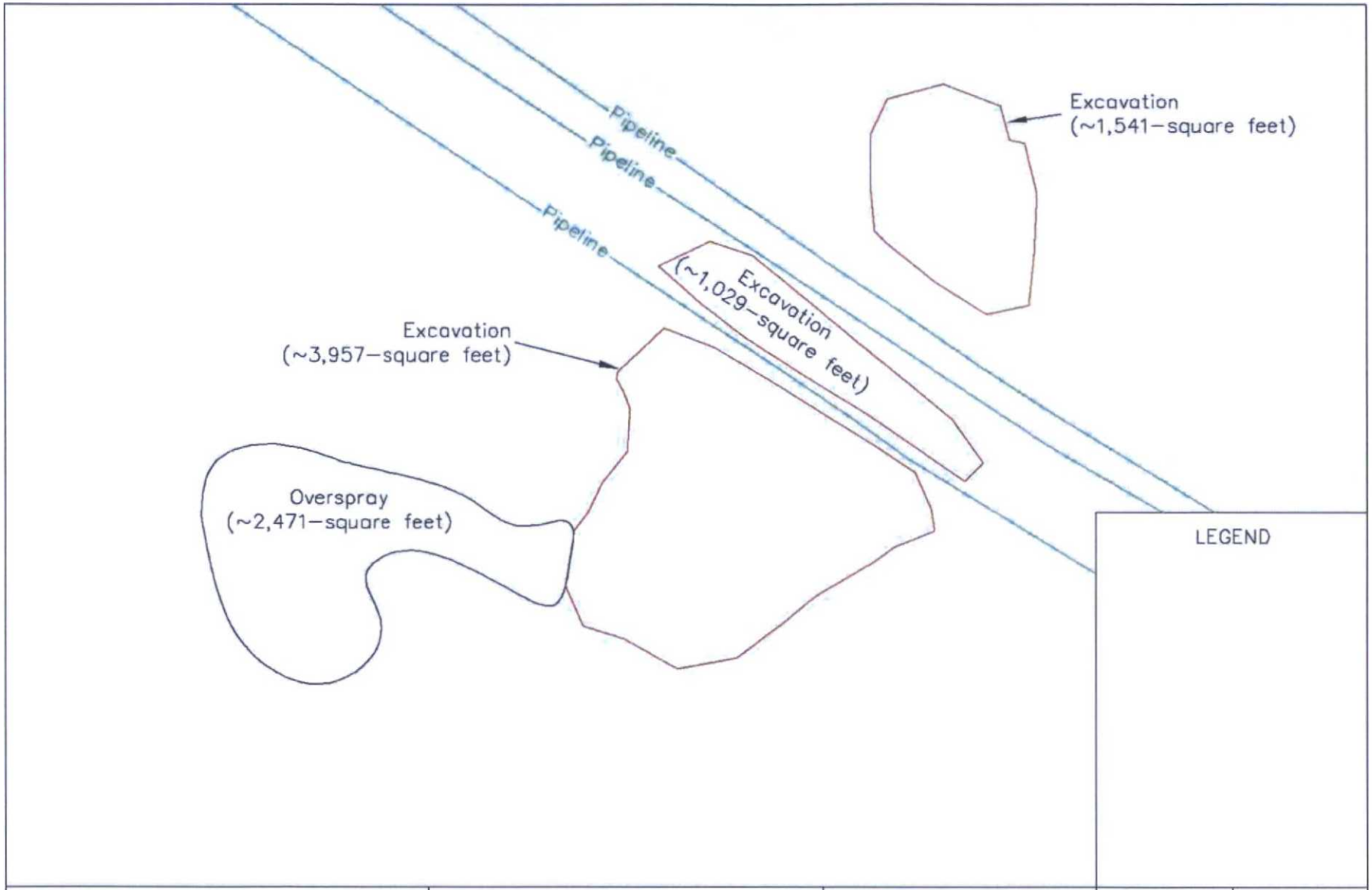

Figure 3 Site Map ConocoPhillips MCA 4-B Header	Lea County, New Mexico SW 1/4 of the SE 1/4, Sec. 23, T17S, R32E N 32° 48' 55.11" W 103 °44' 03.63" Elevation: 4,002 feet amsl	DWG By: D Dominguez April 2012	REVISED:	N
		0 30 60 Feet	SHEET 1 of 1	

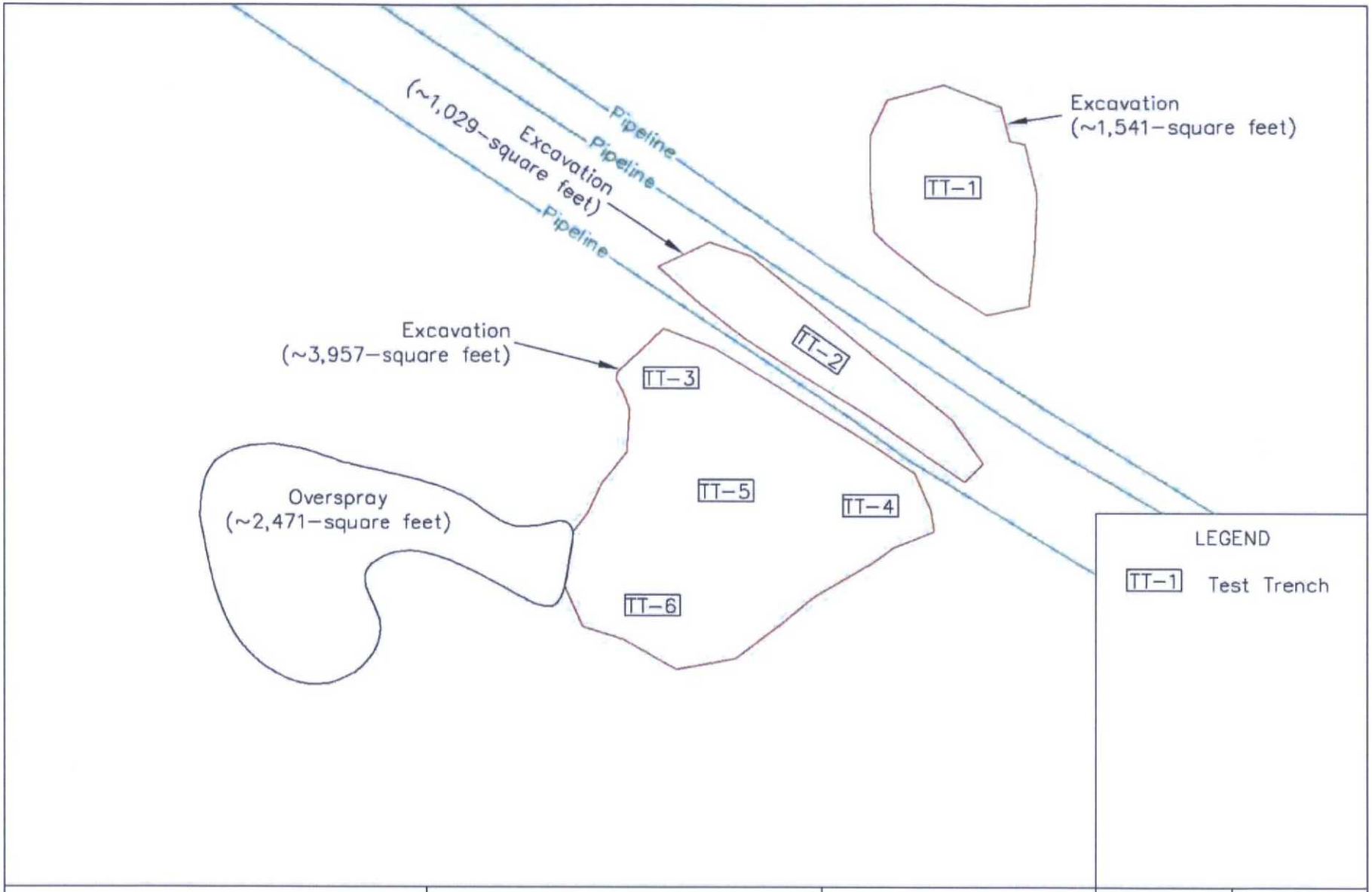

Figure 4 Test Trench Location Map (3/16 & 4/28/11) ConocoPhillips MCA 4-B Header	Lea County, New Mexico SW 1/4 of the SE 1/4, Sec. 23, T17S, R32E N 32° 48' 55.11" W 103 °44' 03.63" Elevation: 4,002 feet amsl	DWG By: D Dominguez April 2012	REVISED:	N
		0 30 60 Feet	SHEET 1 of 1	

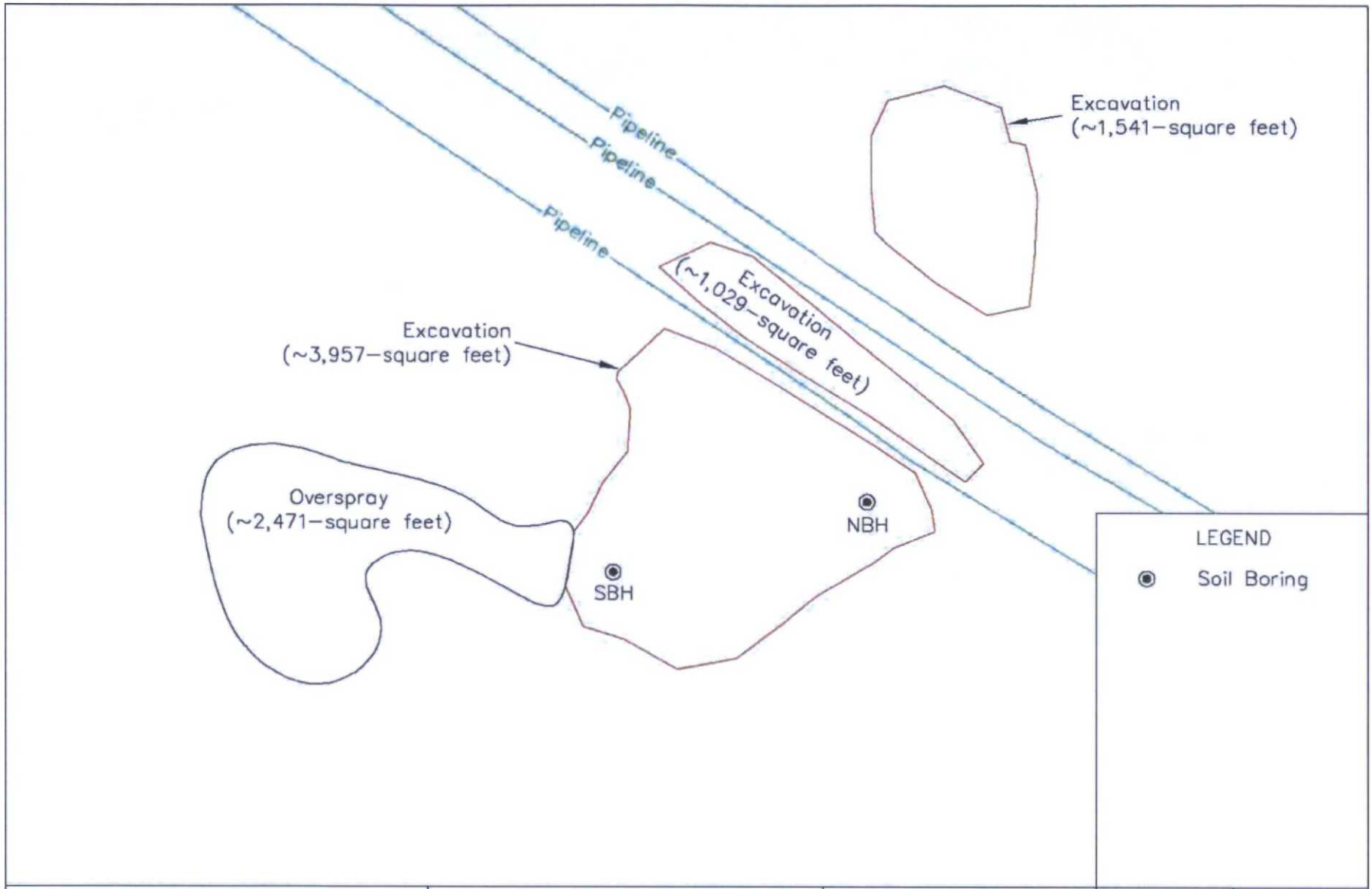

Figure 5 Soil Borings Map (12-15-11) ConocoPhillips MCA 4-B Header	Lea County, New Mexico SW 1/4 of the SE 1/4, Sec. 23, T17S, R32E N 32° 48' 55.11" W 103 °44' 03.63" Elevation: 4,002 feet amsl	DWG By: D Dominguez April 2012 0 30 60 Feet	REVISED: SHEET 1 of 1	N

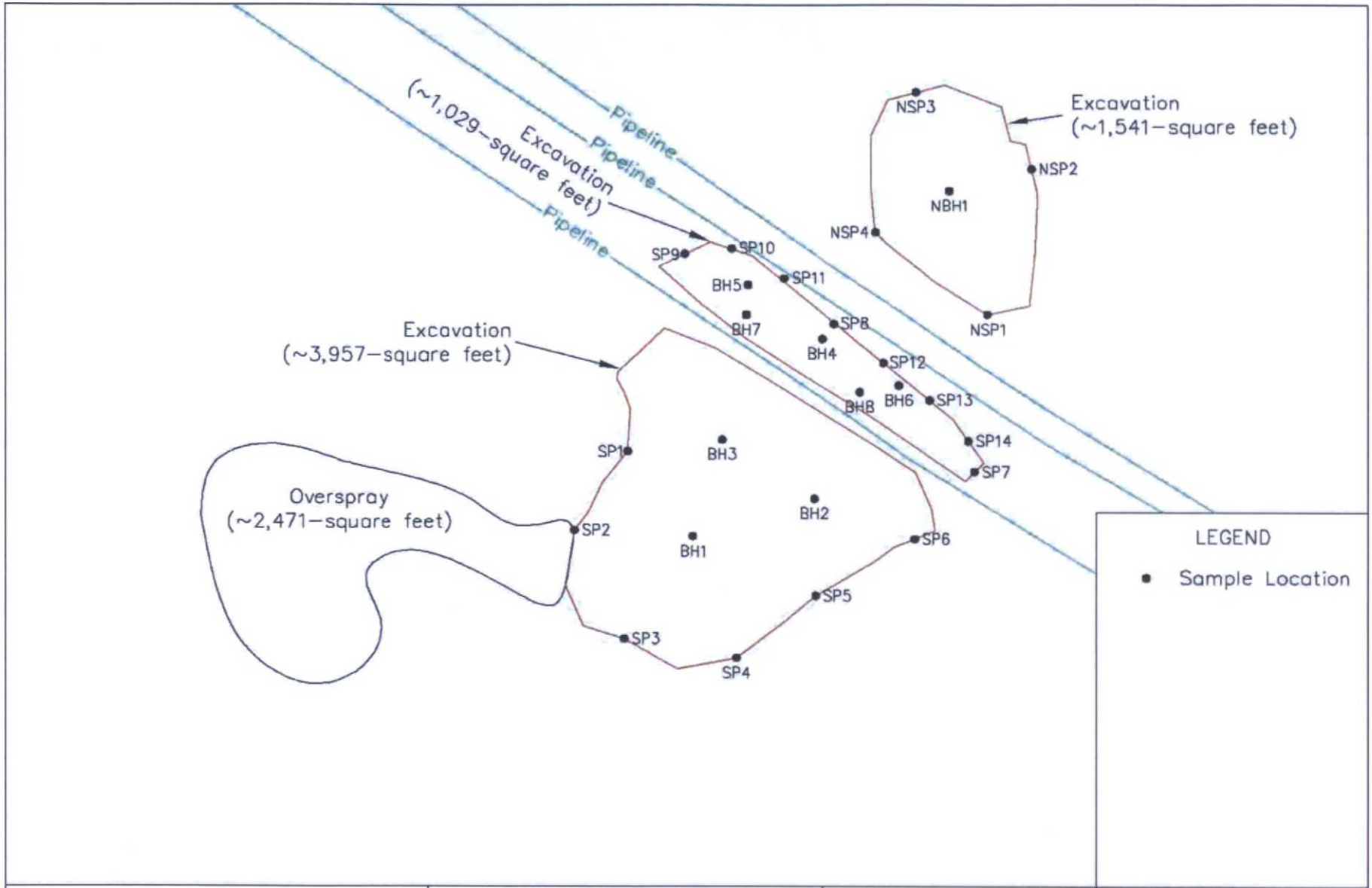

Figure 6 Sample Location Map ConocoPhillips MCA 4-B Header	Lea County, New Mexico SW 1/4 of the SE 1/4, Sec. 23, T17S, R32E N 32° 48' 55.11" W 103 °44' 03.63" Elevation: 4,002 feet amsl	DWG By: D Dominguez April 2012	REVISED:	SHEET 1 of 1

TABLES

TABLE 2

Summary of Hand Auger Soil Sample Field Analyses and Laboratory Analytical Results

ConocoPhillips

MCA 4-B Header - UL-N (SE1/4 of the SW1/4) of Section 23, T17S R32E; Lea County, New Mexico

NMOCD #; EPI Ref. #150029

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C12) (mg/Kg)	TPH (C12-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
SP-1	Sur.	In Situ	08-Sep-10	8.4	240						ND	141	18.4	159	--
SP-1	1	In Situ	08-Sep-10	21.3	--						ND	440	ND	440	--
SP-2	Sur.	In Situ	08-Sep-10	17.8	--						ND	ND	ND	ND	--
SP-2	1	In Situ	08-Sep-10	18.6	--						ND	342	ND	342	--
SP-3	Sur.	In Situ	08-Sep-10	161	--						--	--	--	--	--
SP-3	1	In Situ	08-Sep-10	662	--						--	--	--	--	--
SP-3	2	In Situ	08-Sep-10	102	--						--	--	--	--	--
SP-3	3	In Situ	08-Sep-10	85.2	--						--	--	--	--	--
SP-3	4	In Situ	08-Sep-10	26.1	--						16.3	201	ND	217	--
SP-3	5	In Situ	08-Sep-10	22.2	--						18.2	242	ND	260	
SP-4	Sur.	In Situ	08-Sep-10	800	--						--	--	--	--	--
SP-4	1	In Situ	08-Sep-10	--	--						--	--	--	--	--
SP-4	1	In Situ	08-Sep-10	1,886	--						--	--	--	--	--
SP-4	2	In Situ	08-Sep-10	1,785	--						--	--	--	--	--
SP-4	3	In Situ	08-Sep-10	1,776	--						--	--	--	--	--
SP-4	4	In Situ	08-Sep-10	1,779	--						--	--	--	--	--

TABLE 2

Summary of Hand Auger Soil Sample Field Analyses and Laboratory Analytical Results

ConocoPhillips

MCA 4-B Header - UL-N (SE1/4 of the SW1/4) of Section 23, T17S R32E; Lea County, New Mexico

NMOCD #; EPI Ref. #150029

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C12) (mg/Kg)	TPH (C12-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
SP-4	5	In Situ	08-Sep-10	1,619	--						--	--	--	--	--
SP-4	6	In Situ	08-Sep-10	1,932	--						--	--	--	--	--
SP-4	7	In Situ	08-Sep-10	1,448	--						--	--	--	--	--
SP-5	Sur.	In Situ	08-Sep-10	261	--						--	--	--	--	--
SP-5	1	In Situ	08-Sep-10	18.9	--						ND	41.4	ND	41.4	--
SP-5	2	In Situ	08-Sep-10	42.6	--						ND	ND	ND	ND	--
SP-6	Sur.	In Situ	08-Sep-10	29.2	--						ND	ND	ND	ND	--
SP-6	1	In Situ	08-Sep-10	41.3	--						ND	ND	ND	ND	--
SP-7	Sur.	In Situ	08-Sep-10	38.2	--						ND	89.2	ND	89.2	--
SP-7	1	In Situ	08-Sep-10	33.3	--						ND	ND	ND	ND	--
SP-8	Sur.	In Situ	08-Sep-10	26.3	--						ND	ND	ND	ND	--
SP-8	1	In Situ	08-Sep-10	34.2	--						ND	ND	ND	ND	--
SP-9	Sur.	In Situ	08-Sep-10	438	--						--	--	--	--	
SP-9	1	In Situ	08-Sep-10	51.3	--						--	--	--	--	--
SP-9	2	In Situ	08-Sep-10	38.2	--						ND	19.0	ND	19.0	--
SP-9	3	In Situ	08-Sep-10	39.1	--						ND	ND	ND	ND	--

TABLE 2

Summary of Hand Auger Soil Sample Field Analyses and Laboratory Analytical Results

ConocoPhillips

MCA 4-B Header - UL-N (SE1/4 of the SW1/4) of Section 23, T17S R32E; Lea County, New Mexico

NMOCD #; EPI Ref. #150029

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C12) (mg/Kg)	TPH (C12-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
SP-10	Sur.	In Situ	08-Sep-10	89.5	--						--	--	--	--	--
SP-10	1	In Situ	08-Sep-10	71.2	--						--	--	--	--	--
SP-10	2	In Situ	08-Sep-10	13.9	--						ND	ND	ND	ND	--
SP-10	3	In Situ	08-Sep-10	41.0	--						ND	ND	ND	ND	--
NMOCD Remedial Threshold Goals				100		10				50				100	250 [1]

Bolded values are in excess of NMOCD Remediation Thresholds

[1] Chloride residuals may not be capable of impacting groundwater above NMWQCC Ground Water Standards of 250 mg/L

J = Detected, but below Reporting Limits. Therefore, result ia an estimated concentration (CLP J-Flag)

-- = Not Analyzed; ND - Not Detected; SP-Sample Point; Sur. - Surfac

TABLE 3

Summary of Excavation Soil Sample Field Analyses and Laboratory Analytical Results

ConocoPhillips

MCA 4-B Header - UL-N (SE1/4 of the SW1/4) of Section 23, T17S R32E; Lea County, New Mexico

NMOCD #1RP-11-10-2652; EPI Ref. #150029

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C10) (mg/Kg)	TPH (C10-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
TT-1	2	In Situ	16-Mar-11	2.8	--	--	--	--	--	--	ND	ND	ND	ND	--
TT-1	4	In Situ	16-Mar-11	1.7	320	--	--	--	--	--	ND	ND	ND	ND	488
TT-1	5	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	--
TT-1	6	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	2,530
TT-2	3	In Situ	16-Mar-11	1.6	--	--	--	--	--	--	ND	ND	ND	ND	--
TT-2	4	In Situ	16-Mar-11	1.1	--	--	--	--	--	--	ND	ND	ND	ND	2,730
TT-2	5	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	--
TT-2	6	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	1,570
TT-3	5	In Situ	16-Mar-11	0.7	560	--	--	--	--	--	ND	ND	ND	ND	311
TT-3	6	In Situ	16-Mar-11	0.4	--	--	--	--	--	--	ND	ND	ND	ND	--
TT-3	6	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	--
TT-3	7	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	822
TT-4	4	In Situ	16-Mar-11	63.1	--	--	--	--	--	--	ND	1,360	105	1,465	--
TT-4	5	In Situ	16-Mar-11	52.4	--	--	--	--	--	--	ND	1,550	109	1,659	--
TT-4	6	In Situ	16-Mar-11	2.0	1,320	--	--	--	--	--	ND	17.5	ND	17.5	131
TT-5	4	In Situ	16-Mar-11	1.1	--	--	--	--	--	--	ND	ND	ND	ND	--
TT-5	5	In Situ	16-Mar-11	1.7	--	--	--	--	--	--	ND	ND	ND	ND	485

TABLE 3

Summary of Excavation Soil Sample Field Analyses and Laboratory Analytical Results

ConocoPhillips

MCA 4-B Header - UL-N (SE1/4 of the SW1/4) of Section 23, T17S R32E; Lea County, New Mexico

NMOCD #1RP-11-10-2652; EPI Ref. #150029

Sample I D	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C10) (mg/Kg)	TPH (C10-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
TT-5	6	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	--
TT-5	7	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	3,670
TT-6	4	In Situ	16-Mar-11	3.8	--	--	--	--	--	--	ND	ND	ND	ND	--
TT-6	5	In Situ	16-Mar-11	6.2	--	--	--	--	--	--	ND	ND	ND	ND	--
TT-6	6	In Situ	16-Mar-11	2.8	--	--	--	--	--	--	ND	ND	ND	ND	137
WSW	2	In Situ	16-Mar-11	1,249	--	--	--	--	--	--	4,350	12,400	368	17,118	221
WSW-A	4	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	19.1	ND	19.1	--
WSW-B	5	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	--
WSW-C	6	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	1,630
ESWM	1	In Situ	16-Mar-11	4.9	--	--	--	--	--	--	ND	ND	ND	ND	853
ESWM-A	2	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	36.3	ND	36.3	--
ESWM-B	3	In Situ	28-Apr-11	--	--	--	--	--	--	--	ND	ND	ND	ND	295
PORSW	1	In Situ	16-Mar-11	9.3	--	--	--	--	--	--	ND	ND	ND	ND	30.8
East Hill	1	In Situ	16-Mar-11	3.0	--	--	--	--	--	--	ND	ND	ND	ND	37.6
Resumption of Remedial Activities commencing 10-28-11															
SW-1	3	In Situ	07-Nov-11	35.1	400	--	--	--	--	--	<10.0	<10.0	--	<20.0	304
SW-2	3	In Situ	07-Nov-11	38.1	--	--	--	--	--	--	<10.5	10.5	--	10.5	416

TABLE 3

Summary of Excavation Soil Sample Field Analyses and Laboratory Analytical Results

ConocoPhillips

MCA 4-B Header - UL-N (SE1/4 of the SW1/4) of Section 23, T17S R32E; Lea County, New Mexico

NMOCD #1RP-11-10-2652; EPI Ref. #150029

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C10) (mg/Kg)	TPH (C10-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
SW-3	3	In Situ	07-Nov-11	20.9	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	96.0
SW-4	3	In Situ	07-Nov-11	41.3	--	--	--	--	--	--	--	--	--	--	192
SW-5	3	In Situ	07-Nov-11	16.1	--	--	--	--	--	--	--	--	--	--	278
SW-6	3	Excavated	07-Nov-11	43.9	--	--	--	--	--	--	10.0	544	--	554	800
SW-6B	3	In Situ	30-Nov-11	--	320	--	--	--	--	--	<10.0	<10.0	--	<20.0	144
BH-1	7	In Situ	07-Nov-11	47.7	1,120	--	--	--	--	--	--	--	--	--	--
BH-2	7	In Situ	07-Nov-11	38.5	960	--	--	--	--	--	--	--	--	--	--
BH-3	7	In Situ	07-Nov-11	35.6	1,640	--	--	--	--	--	--	--	--	--	--
BH-4				--	--	--	--	--	--	--					
BH-5	8	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	896
BH-6	8	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	1,680
BH-7	10	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	3,000
BH-8	10	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	4,080
SW-7	3	In Situ	07-Nov-11	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	256
SW-8	3	Excavated	07-Nov-11	--	--	--	--	--	--	--	--	--	--	--	320
SW-8A	3	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	144
SW-9	3	In Situ	07-Nov-11	--	--	--	--	--	--	--	--	--	--	--	384
SW-10	3	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	224
SW-11	3	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	320
SW-12	3	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	192

TABLE 3

Summary of Excavation Soil Sample Field Analyses and Laboratory Analytical Results

ConocoPhillips

MCA 4-B Header - UL-N (SE1/4 of the SW1/4) of Section 23, T17S R32E; Lea County, New Mexico

NMOCD #1RP-11-10-2652; EPI Ref. #150029

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C10) (mg/Kg)	TPH (C10-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
SW-13	3	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	224
SW-14	3	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	14.9	--	14.9	192
NSW-1	3	Excavated	07-Nov-11	--	--	--	--	--	--	--	--	--	--	--	1,390
NSW-1A	3	In Situ	18-Jan-12	--	--	--	--	--	--	--	<10.0	490	--	**490**	**400**
NSW-2	3	Excavated	07-Nov-11	--	--	--	--	--	--	--	--	--	--	--	112
NSW-2A	3	In Situ	30-Nov-11	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	160
NSW-3	3	In Situ	07-Nov-11	--	--	--	--	--	--	--	--	--	--	--	144
NSW-4	3	In Situ	07-Nov-11	--	--	--	--	--	--	--	--	--	--	--	176
NBH-1	6	In Situ	30-Nov-11	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	16.0
NMOCD Remedial Threshold Goals				100		10				50				100	250

Bolded values are in excess of NMOCD Remediation Thresholds

Soil Sample Nomenclature; BH = Bottom Hole; SW= Side Wall (N=North; S=South; E-East; W=West)

J = Detected, but below Reporting Limits. Therefore, result is an estimated concentration (CLP J-Flag)

-- = Not Analyzed, ND - Not Detected; SP-Sample Point; Sur - Surface

TABLE 4

Summary of Soil Borings Soil Sample Field Analyses and Laboratory Analytical Results

ConocoPhillips

MCA 4-B Header - UL-N (SE1/4 of the SW1/4) of Section 23, T17S R32E; Lea County, New Mexico

NMOCD #; EPI Ref. #150029

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C10) (mg/Kg)	TPH (>C10-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
SBH-1	30	In Situ	15-Dec-11	--	1,640	--	--	--	--	--	<10.0	<10.0	--	<20.0	1,820
SBH-2	35	In Situ	15-Dec-11	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	1,120
SBH-3	40	In Situ	15-Dec-11	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	384
SBH-4	45	In Situ	15-Dec-11	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	112
NBH-1	30	In Situ	15-Dec-11	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	704
NBH-2	35	In Situ	15-Dec-11	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	96.0
NBH-3	40	In Situ	15-Dec-11	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	80.0
NBH-4	45	In Situ	15-Dec-11	--	--	--	--	--	--	--	<10.0	<10.0	--	<20.0	48.0
NMOCD Remedial Threshold Goals				100		10				50				100	250

Bolded values are in excess of NMOCD Remediation Thresholds

SBH - South Bore Hole; NBH - North Bore Hole

J = Detected, but below Reporting Limits. Therefore, result ia an estimated concentration (CLP J-Flag)

-- = Not Analyzed; ND - Not Detected

ATTACHMENTS

ATTACHMENT I

SITE PHOTOGRAPHS

Photograph No. 1 – Looking westerly at original Release Area


Photograph No. 2 – Looking southwesterly at Second Release Area

Photograph No. 3 – Looking westerly at North Excavation

Photograph No. 4 – Looking westerly at South Excavation

Photograph No. 5 – Looking at Trackhoe Test Trench in South excavation

Photograph No. 6 – Looking westerly at finished bottom of South excavation awaiting clay barrier

Photograph No. 7 – Looking westerly at two (2) feet thick clay barrier

Photograph No. 8 – Looking southerly at finished sub-surface grade in preparation for advancement of soil borings

Photograph No. 9 – Looking westerly at finished backfill operations

Photograph No. 10 – Looking southwesterly at loamy sand material used in reclamation of excavation Ingress/Egress road

ATTACHMENT II

LABORATORY ANALYTICAL RESULTS AND CHAIN-OF CUSTODY FORM

(Note: Attached on USB Flash Drive at end of Report)

ATTACHMENT III

COPY OF INITIAL NMOCD FORM C-141 (AMENDED)
COPY OF FINAL NMOCD FORM C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company **ConocoPhillips Company**	Contact **John W. Gates**
Address **3300 North A St. Bldg 6, Midland, TX 79705-5406**	Telephone No. **505.391.3158**
Facility Name **MCA 4B Header**	Facility Type **Oil and Gas**

Surface Owner **Federal**	Mineral Owner **Federal**	Lease No **LC-030437A**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	**23**	**17S**	**32E**					**IEA**

Latitude **Longitude**

NATURE OF RELEASE

Type of Release **Crude Oil & Produced Water**	Volume of Release **64.5**bbl (**48**oil, **16.5**water)	Volume Recovered (**48 bbls**oil, **12 bbls**water)
Source of Release **Dresser sleeve on a 4 inch transite to a 4 inch steel production line**	Date and Hour of Occurrence **2-6-11 unknown**	Date and Hour of Discovery **2-6-11 0915**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Trishia Bad Bear BLM**	
By Whom? **John Gates**	Date and Hour **2-7-11 0713**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
On Sunday February 6, 2011 at 0900 hours at the MCA 4B header located in the Buckeye, New Mexico operations area an agency reportable release occurred when severe cold weather caused a dresser sleeve on a 4 inch production line to leak.

Describe Area Affected and Cleanup Action Taken.*
The affected area is a 70' X 70' X 1" area of sandy pasture land. Upon discovery the foreman isolated the line by re-directing fluids through another line and then called for a vacuum truck to pick up standing fluids. The vacuum truck was able to recover 48 bbls of oil and 12 bbls of produced water. (Amended C-141) On 2/7/11 Vacuum truck recovered additional 35 bbls of fluids and transported to Sundance Disposal. 2/10/11 vacuum truck picked up 66 bbls of solids and transported to disposal. Total volume of fluids recovered is 115 bbls. with 66 bbls solid material (Sludge)

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: John W. Gates	OIL CONSERVATION DIVISION	
Printed Name: **John W. Gates**	Approved by District Supervisor:	
Title: **HSER Lead**	Approval Date:	Expiration Date:
E-mail Address: **John.W.Gates@conocophillips.com**	Conditions of Approval:	Attached ☐

Date: **2/7/11** Phone: **505.391.3158**		

- Attach Additional Sheets If Necessary

116 RELEASE NOTIFICATION AND CORRECTIVE ACTION [1-1-50...2-1-96; A, 3-15-97]

116.A. NOTIFICATION

(1) The Division shall be notified of any unauthorized release occurring during the drilling, producing, storing, disposing, injecting, transporting, servicing or processing of crude oil, natural gases, produced water, condensate or oil field waste including Regulated NORM, or other oil field related chemicals, contaminants or mixture thereof, in the State of New Mexico in accordance with the requirements of this Rule. [1-1-50...2-1-96; A, 3-15-97]

(2) The Division shall be notified in accordance with this Rule with respect to any release from any facility of oil or other water contaminant, in such quantity as may with reasonable probability be detrimental to water or cause an exceedance of the standards in 19 NMAC 15.A.19. B(1), B(2) or B(3). [3-15-97]

116.B. REPORTING REQUIREMENTS: Notification of the above releases shall be made by the person operating or controlling either the release or the location of the release in accordance with the following requirements: [5-22-73...2-1-96; A, 3-15-97]

(1) A **Major Release** shall be reported by giving **both** immediate verbal notice and timely written notice pursuant to Paragraphs C(1) and C(2) of this Rule. A Major Release is:

(a) an unauthorized release of a volume, excluding natural gases, in excess of 25 barrels;

(b) an unauthorized release of any volume which:

(i) results in a fire;

(ii) will reach a water course;

(iii) may with reasonable probability endanger public health; or

(iv) results in substantial damage to property or the environment;

(c) an unauthorized release of natural gases in excess of 500 mcf; or

(d) a release of any volume which may with reasonable probability be detrimental to water or cause an exceedance of the standards in 19 NMAC 15.A.19. B(1), B(2) or B(3). [3/15/97]

(2) A **Minor Release** shall be reported by giving timely written notice pursuant to Paragraph C(2) of this Rule. A Minor Release is an unauthorized release of a volume, greater than 5 barrels but not more than 25 barrels; or greater than 50 mcf but less than 500 mcf of natural gases. [3-15-97]

116.C. CONTENTS OF NOTIFICATION

(1) **Immediate verbal notification** required pursuant to Paragraph B shall be reported within twenty-four (24) hours of discovery to the Division District Office for the area within which the release takes place. In addition, immediate verbal notification pursuant to Subparagraph B.(1).(d). shall be reported to the Division's Environmental Bureau Chief. This notification shall provide the information required on Division Form C-141. [5-22-73 . 2-1-96; A, 3-15-97]

(2) **Timely written notification** is required to be reported pursuant to Paragraph B within fifteen (15) days to the Division District Office for the area within which the release takes place by completing and filing Division Form C-141. In addition, timely written notification required pursuant to Subparagraph B.(1).(d). shall also be reported to the Division's Environmental Bureau Chief within fifteen (15) days after the release is discovered. The written notification shall verify the prior verbal notification and provide any appropriate additions or corrections to the information contained in the prior verbal notification. [5-22-73...2-1-96; A, 3-15-97]

116.D. CORRECTIVE ACTION: The responsible person must complete Division approved corrective action for releases which endanger public health or the environment. Releases will be addressed in accordance with a remediation plan submitted to and approved by the Division or with an abatement plan submitted in accordance with Rule 19 (19 NMAC 15.A. 19). [3-15-97]

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: ConocoPhillips Company	**Contact:** John W. Gates
Address: 3300 North "A" St., Bldg. 6, Midland, Tx. 79705-5406	**Telephone No.:** (575) 391-3158
Facility Name: MCA 4B Header	**Facility Type:** Production Flowline

Surface Owner: Federal [Department of the Interior; Bureau of Land Management (BLM)]	**Mineral Owner:** Federal (BLM)	**Lease No.** LC-030437A

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	South Line	Feet from the	West Line	County
N	23	17S	32E					Lea

Latitude: N32° 48' 07.46" **Longitude:** W103° 28' 33.70"

NATURE OF RELEASE

Type of Release: Crude Oil and Produced Water	**Volume of Release:** 7-13-10 (16.3 bbls); 2-06-11 (95 bbls)	**Volume Recovered:** 7-13-10 (16.3 bls oil); 2-02-11 (48 bbls. Oil; 12 bbls water); 2-07-11 (35-bbls; 2-10-11 (66-bbls sludge)
Source of Release: Compression fitting separated on a 4" dia. asbestos cement flowline	**Date and Hour of Occurrence:** 7-13-10 @ 10:00 AM; 2-06-12 @ UNK	**Date and Hour of Discovery:** 7-13-10 @ 10:00 AM; 2-06-11 @ 9:15 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☒ Not Required	**If YES, To Whom? 7-14-10 – Geoffrey Leking (NMOCD); 2-07-11 – Trisha Bad Bear (BLM)**	
By Whom? John Gates	**Date and Hour:** 7-14-10 @ 13:30 PM; 2-07-11 @ 7:13 AM	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse:** N/A	

If a Watercourse was Impacted, Describe Fully. N/A

Depth to Groundwater: > 55-60 feet below ground surface (bgs)

Describe Cause of Problem and Remedial Action Taken.* On both release events a compression fitting separated from a 4"-dia. Asbestos cement flowline; oil /water product and sludge were vacuumed from release area and disposed at Sundance Services, Inc.; ConocoPhillips retained the services of Environmental Plus, Inc., (EPI) to GPS survey, photograph, collect soil samples via hand augering, and develop a *Remediation Proposal* for the NMOCD and BLM

Describe Area Affected and Cleanup Action Taken.* Please Note Attached Sheet

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: John W. Gates	OIL CONSERVATION DIVISION **Approved by Environmental Engineer:**	
Printed Name: John W. Gates		
Title: HSER Lead	**Approval Date:**	**Expiration Date:**
E-mail Address: John.W.Gates@conocophillips.com	**Conditions of Approval:**	**Attached** ☐
Date: 4-26-12 **Phone:** (575) 391-3158		

*** Attach Additional Sheets If Necessary**

Describe Area Affected and Cleanup Action Taken:

EPI mobilized labor and equipment to the release area on March 4, 2011 and commenced preventative remedial activities. From March 4-8, 2011, ±518-c.y. of petroleum contaminated soil were excavated and transferred to Controlled Recovery, Inc., (CRI) for disposal. On March 16, 2011 six (6) sample trenches were excavated with fourteen (14) soil samples collected and remitted to an independent laboratory for analyses of TPH and chloride concentrations. This procedure was repeated again on April 28, 2011 when thirteen (13) soil samples were collected, but at different locales. Laboratory results for all soil samples collected indicated TPH concentrations were below and chloride concentrations elevated above NMOCD Remedial Threshold Goals (Goals). Based on field observations and "constituents-of-concern" derived from laboratory analyses, EPI developed a *Remediation Proposal* with submittal to NMOCD and BLM for approval on April 12, 2011.

Following approval of the *Remediation Proposal*, EPI re-mobilized to the release area on October 28, 2011 and commenced remedial activities. From October 28-November 18, 2011, ±1,846 c.y. of impacted material were excavated and transported to CRI. In an effort to delineate vertical depth of impacted material, a trackhoe excavated a sample trench to a depth of seventeen (17) feet below botom of excavation. With chloride concentrations elevated above NMOCD Goals for total depth of sample trench, bottom of the excavation was leveled, lined with a minimum two (2) feet compacted clay barrier and backfillled with caliche to within five (5) feet of original ground surface. On December 15, 2011, a drilling rig advanced one (1) each soil boring on the north and south sides of the excavation. Depth of impacted material terminus was identified at forty-five (45) feet bgs on the south side and thirty-five (35) feet bgs on the north side.

Excavation of impacted material continued on the north and south sides of an earthen divisional berm to within three (3) feet of active flow lines. In compliance with ConocoPhillips safety rules and prospects of possible production loss, a decision was made by all parties concerned (ConocoPhillips, NMOCD and BLM) to allow the earthen berm remain "in-situ". Whenever the production lines are permanently removed, the earthen berm will be excavated to a depth coincidental with bottom on the south side, two (2) feet compacted clay barrier installed and backfilled to original ground surface with sandy loam material.

Backfilling of the north and south excavations required ±1,330 c.y. of imported sandy loam material. Ingress/egress road from main lease road to release area was recovered and backfilled with sandy loam material. An earthen berm was erected at the point of intersection to prevent vehicular trespass.

Remaining remedial activities are discing and deep drill seeding of disturbed areas with a blend preferred by the BLM. However, owing to near drought conditions, it is recommended delaying this activity until soil and weather conditions are conducive to vegetative growth.