Bratcher, Mike, EMNRD

From: Bockisch, Bernie <bbockisch@craworld.com>
Sent: Wednesday, February 20, 2013 9:18 AM
To: Bratcher, Mike, EMNRD
Cc: Larson, Thomas
Subject: Pardue Farms Workplan
Attachments: 076323-Bratcher1_mc.pdf

Mike,

I wanted to check with you on the status of the Pardue Farms Workplan. This is a site for Chevron. I have attached a copy of the workplan for your convenience. Could you please let us know if you agree with our approach. Thank you,

Bernie

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December 20, 2012

Reference No. 076323

Mr. Mike Bratcher
New Mexico Oil Conservation Division
District 2
811 S. First Street
Artesia, NM 88210

Dear Mr. Bratcher:

Re: Workplan for Restoration Activities
Chevron Pardue Farms 27-12 Well Site
RP # 2RP-1395
NE/4, SW/4, Section 27, Township 23S, Range 28E
Latitude: N 32.27358, Longitude: W 104.07818
Eddy County, New Mexico

On behalf of the Chevron Environmental Management Company (CEMC), Conestoga-Rovers and Associates (CRA) is pleased to present this work plan to the New Mexico Oil Conservation Division (NMOCD). This work plan presents our proposed approach to restoration activities for a flowline release that occurred at the above referenced well site location in 2010.

PROJECT INFORMATION

The Site is an active well location situated approximately one mile southeast of Loving in Eddy County, New Mexico (see Figure 1, Site Location Map). It is located in the northeast quarter of the southwest quarter of Section 27, Township 23 South, Range 28 East. Chevron personnel who were interviewed indicated that the 27-12 Pardue Farms well produces approximately 12 barrels of oil and 140 barrels of water per day. These fluids are transmitted via flowline to a central tank battery on the Pardue Farms lease. The surface property is owned by private interests. The surrounding area is primarily developed for oil and gas extraction and agricultural purposes.

A leak reportedly occurred in the spring of 2010 from a flowline (see Figure 2, Release Location Map). Based on the size of the surface expression of the leak, the volume was initially estimated at less than five barrels of oil and water. This volume is below New Mexico Oil Conservation Division (NMOCD) reporting requirements and consequently the District 2 office in Artesia was not notified.

Under the direction of environmental staff from the Chevron office in Midland, two soil borings (BH-1 and BH-2) were advanced to depths ranging from 21 to 26 ft below ground surface (bgs) in July 2010. Results of the analytical soil data indicated total petroleum hydrocarbon (TPH) concentrations above regulatory levels were generally limited to the upper five feet in the two borings. However, chloride impacts above regulatory limits were noted in each of the two borings at depths ranging from 21 to 26 ft. bgs.

Six additional soil borings were installed at the Site in April 2012 to further assess the release. Three of these borings were converted to groundwater monitor wells. As part of this assessment, a review of water quality data from surrounding wells was performed and a report of findings was submitted to Mr. Mike Bratcher with the NMOCD District 2 (CRA, November 2012). The results of this assessment can be summarized as follows:

- Petroleum hydrocarbon concentrations in the soil appear to be predominately localized within 5 five feet of ground surface. The petroleum hydrocarbons that are present are predominately diesel range organics.

- Soil concentrations of chlorides exceed NMOCD Recommended Remedial Action Levels. The results of the soil assessment indicate maximum chloride concentrations in soil are located at 5 ft. bgs and diminish with depth.

- Petroleum hydrocarbon concentrations were not detected in groundwater above the laboratory reporting limit.

- Chloride and TDS concentrations were observed in groundwater samples collected from wells at the Site. These concentrations generally exceeded New Mexico Water Quality Control Commission (NMWQCC) regulatory limits. However, historical data of wells located in the vicinity of the site indicate that background concentrations of TDS and chloride generally exceed NMWQCC regulatory limits.

Based on this information, CRA recommends the removal of petroleum and chloride impacted soils to a depth of approximately 5 ft bgs within the impacted area. A liner will be placed in the bottom of the excavation to minimize percolation of meteoric waters within release area. The excavation will be backfilled with clean fill and seeded with an appropriate seed mix.

SCOPE OF WORK

The scope of work for this project will involve well site clean-up and soil removal activities as designated by CEMC. The proposed remediation contractor for this project is Entact, LLC. (Entact). The following outlines basic project responsibilities of CRA and Entact.

Task 1 - Project Preparation

This task includes preparing and submitting this work plan and other project preparation activities that occur after work plan approval, but before fieldwork mobilization. After receiving authorization to proceed, CRA will:

- Obtain a signed access agreement from the property owner;
- Complete the necessary waste characterization documentation for disposal of material to the landfill;
- Develop a Health and Safety Plan (HASP) and job safety analyses (JSAs) that address field work specified in the Work Plan;
- Develop work orders and contracts for subcontractors; and
- Notify the Client a minimum of 24 hours prior to the commencement of remediation activities.

The remediation contractor will notify New Mexico One-Call to facilitate location of underground utilities and pipelines prior to excavation activities.

Task 2 - Field Program

A NMOCD representative (if available), CRA and the selected remediation contractor employees will mobilize to the site to perform a project kickoff meeting. Prior to performing site work, a CRA representative will brief the contractor employees on site conditions as part of the project kickoff meeting. Also discussed during the project kickoff meeting will be the HASP, applicable JSA's, and stop work authority (SWA). Tailgate safety meetings will be conducted daily at the beginning of the day and as conditions change. The field program will consist of the following:

- The impacted area has been estimated to be approximately 60 ft wide by 120 ft long (Figure 2). Soil in the affected area shall be excavated to a depth of approximately 5 ft below ground surface (bgs). This volume has been estimated at approximately 2000 cubic yards (yd3, including a swell factor of 50%). The Chevron-approved soil disposal facility identified for this project is Sundance/Parabo, in Eunice, New Mexico.
- Soils shall be field screened during excavation using the Petroflag field screening method. Petroflag field screening is a colorimetric method that is more accurate for assessing diesel and motor oil range petroleum hydrocarbons than using heated headspace. If field screening samples indicate that soils are below regulatory levels, excavation would halt to minimize the amount of soil to be excavated.

Confirmation samples will be collected and analyzed for total petroleum hydrocarbons (TPH) for gasoline, diesel, and motor oil range (GRO/DRO/MRO) organics by EPA Method 8015 and chlorides by EPA Method 300.0.

- Soil analytical data indicates that TPH impacted soil is not present in the vicinity of the monitor wells. Based on this, abandonment of the monitor wells is not anticipated at this time.
- A 20 mil polyethylene liner shall be placed in the bottom of the excavation. Liner seams shall be overlapped a minimum of 24 inches. Each liner shall be placed without rips or tears. A minimum of 1 foot of clean sand shall be placed over each liner to prevent damage during backfilling.
- Each excavation will be backfilled to grade using clean fill material
- After completion of backfill activities, the disturbed areas will be reseeded with a seed mix and rate that is approved by the New Mexico State Land Office.

A CRA representative will be present to observe and document the field activities. The CRA representative will maintain daily reports of field activities.

Health and Safety Considerations

Personal protective clothing including fire retardant clothing, steel-toed work boots, gloves, safety glasses and hard hats will be required (basic Level D requirements) during all field tasks. The project HASP will be maintained onsite. It will be reviewed and signed by on-site personnel, subcontractors, and authorized visitors.

Quality Assurance/Quality Control

Confirmation sampling will be completed in accordance with our standard Quality Assurance/Quality Control procedures designed to minimize cross-contamination between samples and to provide reliable laboratory results.

Task 3: Reporting

A short letter report summarizing remediation activities will be submitted. The letter report will include a Site description, project history, description of field events, a discussion of results, and recommendations (if any). The report will include:

- A scaled site plan showing the locations of the excavation and other site features (including latitude and longitude coordinates);
- Tabulation of field screening and laboratory analytical test results;
- Copies of landfill manifests; and
- Final site photographs.

WORKPLAN APPROVAL REQUEST

CRA is prepared to initiate the scope of work immediately, subsequent to CEMC approvals, the availability of resources and stakeholder concurrence. This project is anticipated to require 5 to 10 days to complete, not including any delays for inclement weather or other unforeseen events. A start date will be provided following formal NMOCD approval.

If you have any questions or comments with regards to this work plan, please do not hesitate to contact our Albuquerque office at (505) 884-0672. Your timely response to this correspondence is appreciated.

Yours truly,

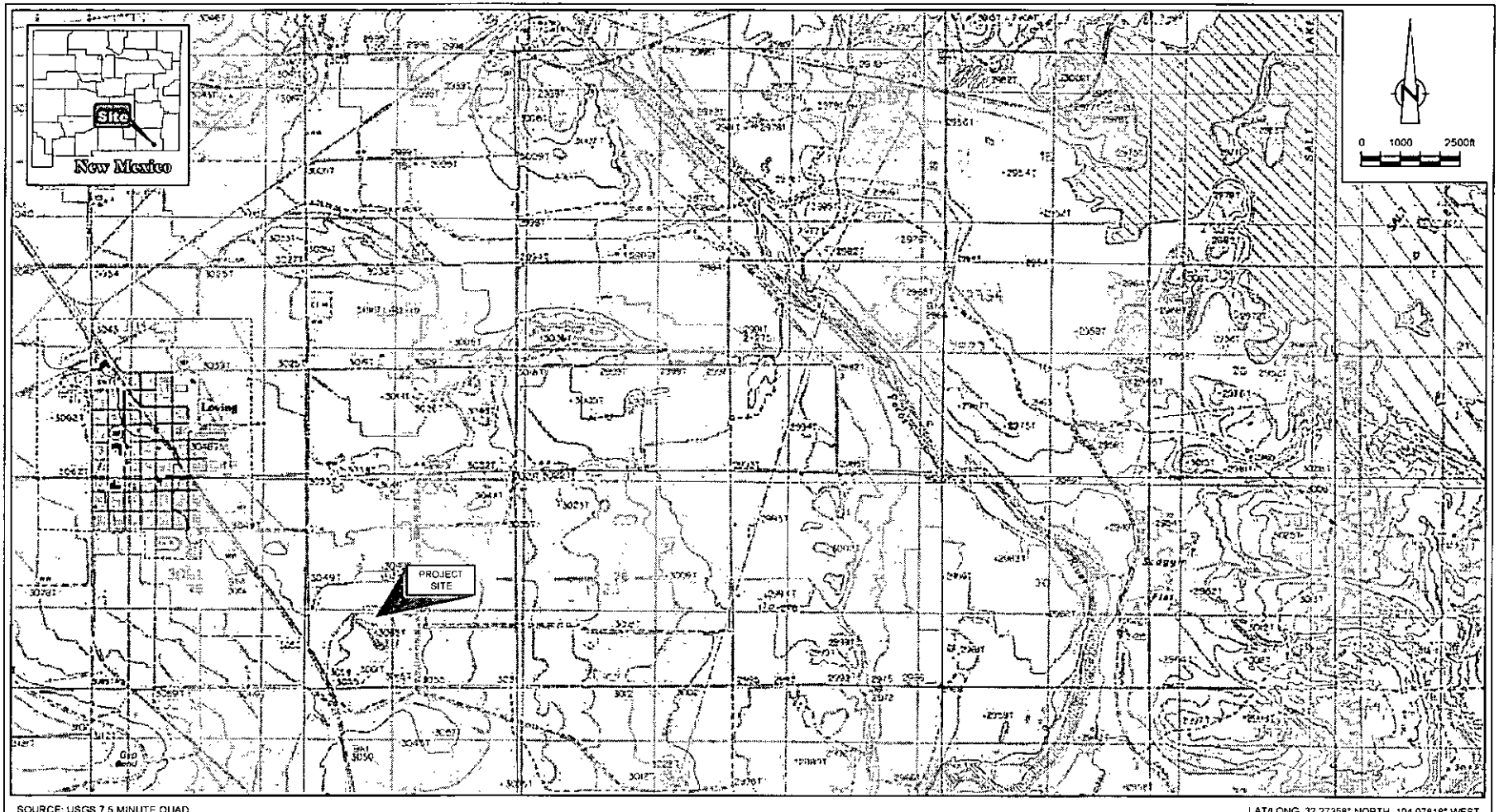
CONESTOGA-ROVERS & ASSOCIATES

Bernard Bockisch
Senior Project Manager

Thomas C. Larson
Operations Manager

BB/mc/1

Enclosures:
Figure 1 - Site Location Map
Figure 2 – Release Location Map



SOURCE: USGS 7 5 MINUTE QUAD
"LOVING, NEW MEXICO"

LAT/LONG 32 27358° NORTH, 104 07818° WEST
COORDINATE NAD83 DATUM, U S FOOT
STATE PLANE ZONE - NEW MEXICO EAST

Figure 1

SITE LOCATION MAP
PARDUE FARMS SOIL AND GROUNDWATER ASSESSMENT
LOVING, NEW MEXICO
Chevron Environmental Management Company

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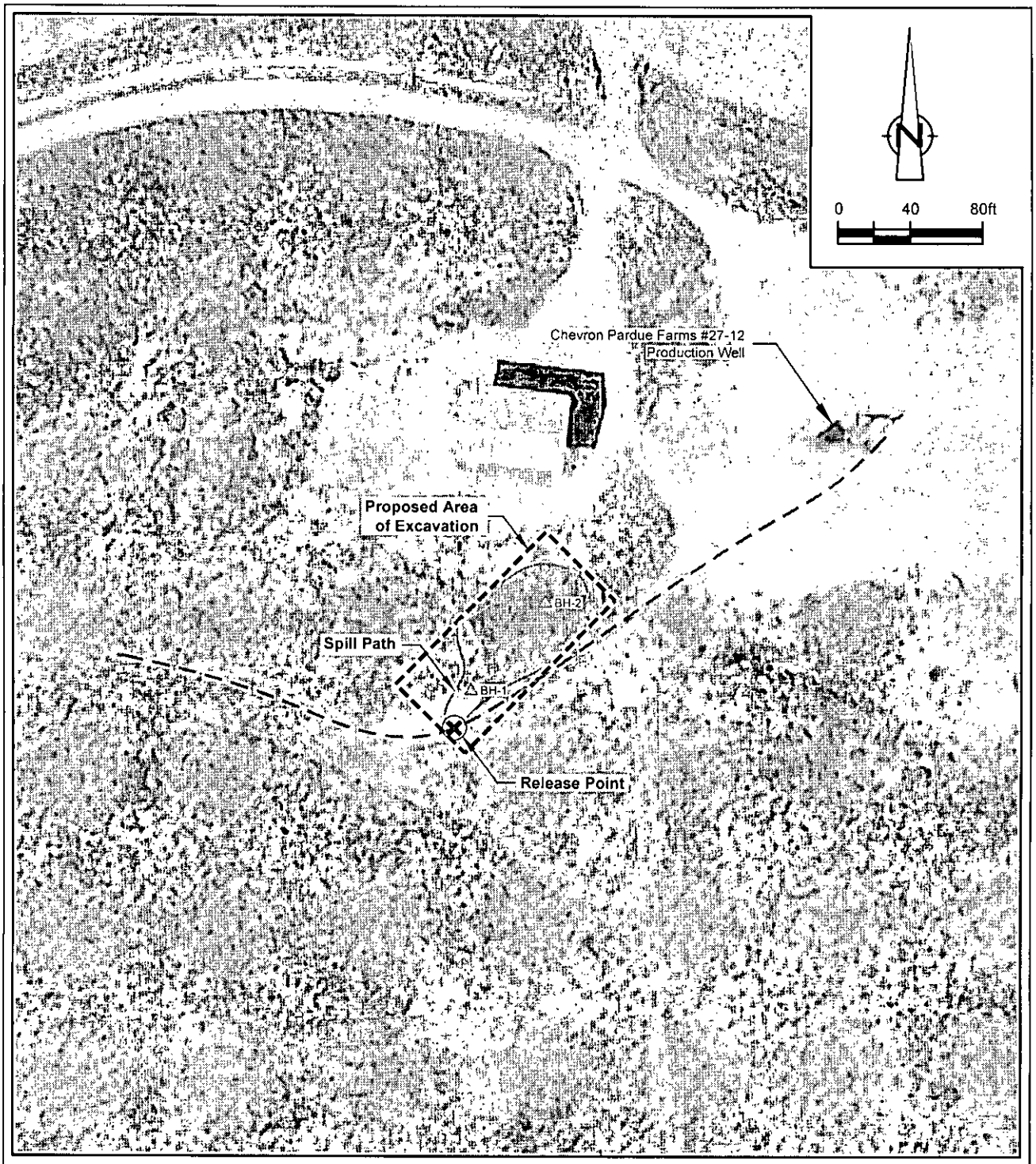

LAT/LONG: 32.27358° NORTH, 104.07818° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

LEGEND

- June 2010 Soil Boring Location
- Flowline Release Point (Approximate)
- Flowline Location (Approximate)

Figure 2

RELEASE LOCATION MAP
PARDUE FARMS SOIL AND GROUNDWATER ASSESSMENT
LOVING, NEW MEXICO
Chevron Environmental Management Company

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