Bratcher, Mike, EMNRD

From: Miller, Gary [Gary.Miller@tetratech.com]
Sent: Thursday, June 18, 2009 9:15 AM
To: VonGonten, Glenn, EMNRD
Cc: Sanchez, Daniel J., EMNRD; Bratcher, Mike, EMNRD; Mark Schell; Bill C. Scott; Skip Wedel
Subject: Unit Petroleum, Gourley Fed #3 Pit Closure request
Attachments: Gourley Fed #3 Pit Closure procedures June 16,2009.pdf

Sirs: the attached is a procedure for the closure of the pit at the above mentioned location. Please review and it meets with your approval please respond. It is anticipated the the closure operations can begin within 10 days of your approval. Thank you, and if you have any questions or comments please call.

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Tetra Tech Inc.
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TETRA TECH

June 16, 2009

Mr. Glenn von Gonten
Environmental Bureau Chief
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

CERTIFIED MAIL RECIEPT # 7004 2510 0001 1869 0507

Re: Proposed Soil Borings and Pit Closure Procedure for the Unit Corporation, Gourley Federal #3 Well, Unit H, Section 28, T-22-S, R-28-E, Eddy County, New Mexico,
Agreed Compliance Order #255

Mr. von Gonten:

The following is submitted for proposed collection of additional data for pit closure at the above mentioned wellsite.

Background
At the request of Unit Corporation, Tetra Tech, Inc. was contracted to perform sampling of an open reserve pit located in Eddy County, New Mexico. This pit was originally sampled for closure in June, 2007. Additional sampling was performed in January, 2009.

As requested by the NMOCD, in January 2009, soil samples were collected from the center and the southwest corner of the pit. Soil samples from a depth of 25' were analyzed for BTEX, chlorides, and Total Petroleum Hydrocarbons (TPH). Confirmation soil samples were also collected for chlorides at 39' in the center and 35' in the southwest corner. During the confirmation sampling, the soils were field screened for chlorides. A 1' to 2' thick, red clay layer was encountered in both sample trenches, at 37' in the center and 34' in the southwest corner.

Southwest Corner
The field screening of the soil samples from the southwest corner of the pit showed chloride concentrations ranging from 5,800 mg/kg at the bottom of the pit, declining to 700 mg/kg at 30', and then increasing to 6,450 mg/kg immediately above the clay layer. Below the clay layer at 35' the soil samples showed field chloride concentration of 750 mg/kg. The laboratory results for the 35' soil sample shows a concentration of 761 mg/kg chlorides.

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Center

The field screening of the center of the pit showed soil chloride concentrations ranging from 13,520 mg/kg at the bottom of the pit, to 19,600 at 15', declining to 1,050 mg/kg at 35'. Immediately above the clay layer (37'), the chloride concentrations increased to 9,450 mg/kg. Below the clay layer at 39', the field chloride concentration was 1,600 mg/kg. The laboratory results for the 39' soil sample showed a concentration of 2,170 mg/kg chlorides.

Proposed Closure

It is proposed to place a total of five (5) soil borings in the center horseshoe section of the pit in order to delineate chloride concentrations to below 10,000 mg/kg. The soil borings would be advanced with an air-rotary type drilling rig to an estimated depth of 20'. Once the data has been collected and analyzed, the center of the pit will be excavated to the horizon where chloride concentrations declined below 10,000 mg/kg. Once excavated and leveled and the area lined with a layer of sand, a 40 mil synthetic impermeable liner will be placed into the excavation to isolate the residual chloride impacted soils. The remainder of the excavation will be backfilled with clean fill material and brought to grade.

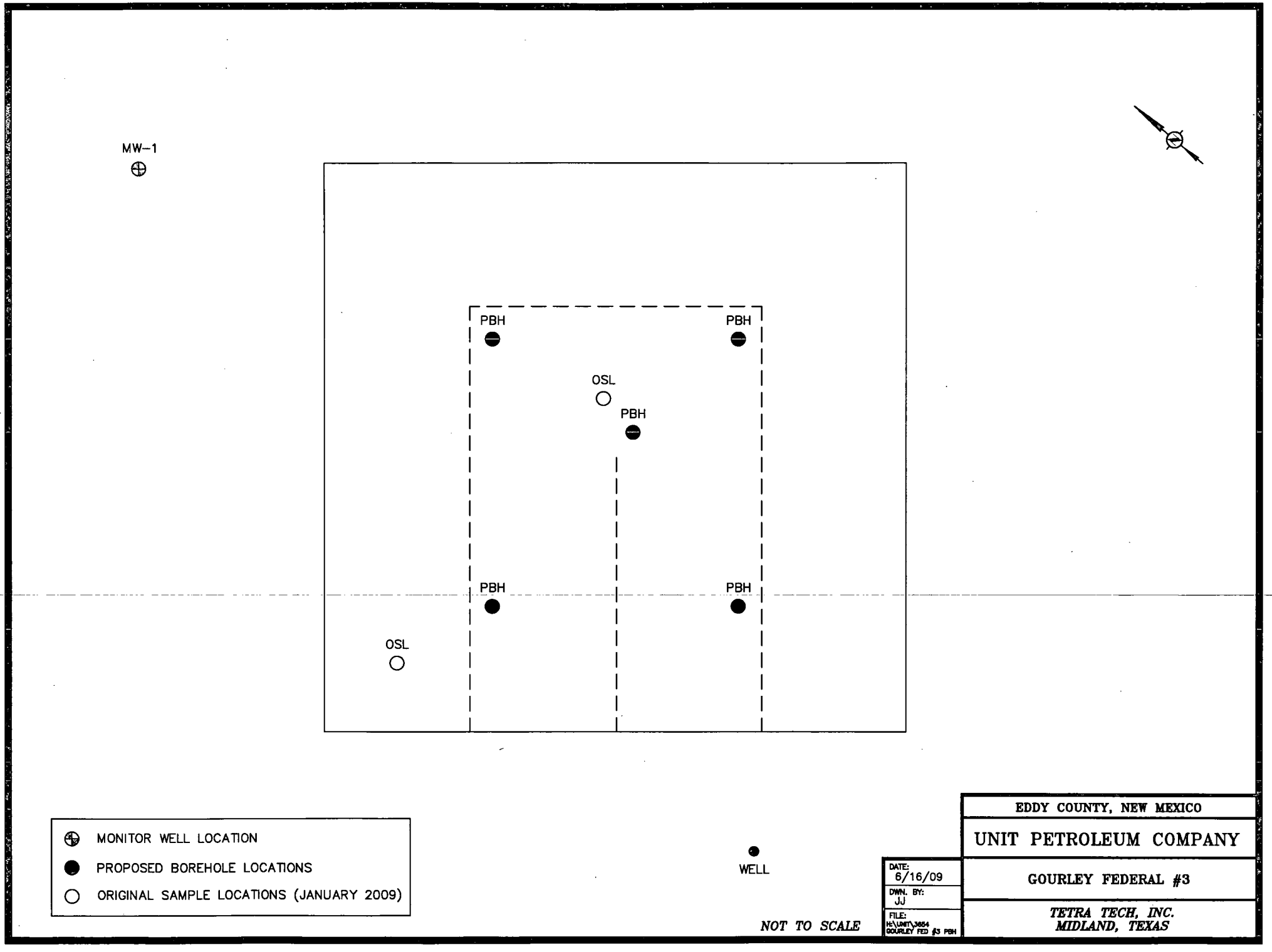
If you require any additional information please call 432-682-4559.

Tetra Tech, Inc.

Gary Miller,
Sr. Project Manager

Attachment: Plat #1: Proposed boring locations

cc: Daniel Sanchez – NMOCD, Santa Fe
Mike Bratcher – NMOCD, Artesia
Skip Wedel - Unit


MW-1
PBH
PBH
OSL
PBH
PBH
PBH
OSL
MONITOR WELL LOCATION
PROPOSED BOREHOLE LOCATIONS
ORIGINAL SAMPLE LOCATIONS (JANUARY 2009)
WELL
NOT TO SCALE
EDDY COUNTY, NEW MEXICO
UNIT PETROLEUM COMPANY
GOURLEY FEDERAL #3
TETRA TECH, INC.
MIDLAND, TEXAS
DATE: 6/16/09
DWN. BY: JJ
FILE: H:\UNIT\3654 GOURLEY FED #3 PBH