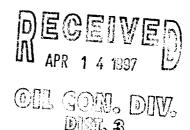
STEPHEN OF A LAS INSPECTOR

DEC COMP

Meter Number: 70467
Location Name: SAN JUAN 29-6 #6-21
Location: TN-29 RG-06
SC-21 UL-K

4 - Fee

NMOCD Zone: OUTSIDE Hazard Ranking Score: 00



RATIONALE FOR RISK-BASED CLOSURE OF PRODUCTION PITS LOCATED OUTSIDE OF THE VULNERABLE ZONE IN THE SAN JUAN BASIN

This production pit location was ranked according to the criteria in the New Mexico Oil Conservation Division's Unlined Surface Impoundment Closure Guidelines and received a ranking score of zero. The estimated depth to groundwater is greater than 100-feet beneath ground surface (bgs), the pit is not in a well head protection area, and there are no surface water bodies within 1,000 horizontal feet of the pit location.

The primary source, discharge to the pit has been removed. There has been no discharge to the pits for at least 4 years and the pits have been closed for at least one year.

Each pit was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Minimal infiltration of rainfall is expected. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching the residual hydrocarbons.

There is no source material at the ground surface, so direct contact of hydrocarbons with livestock and the populous is not likely.

In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within 20 feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstones, shales and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity of the bedrock material are as follows:

Sandstone 10^{-9} to 10^{-13} cm/sec Shale 10^{-12} to 10^{-16} cm/sec Clay 10^{-12} to 10^{-15} cm/sec

Based on this information, the residual hydrocarbons should not migrate to groundwater.

Natural process (bioremediation) are degrading the residual hydrocarbon to carbon dioxide and water and will continue until the source is gone, therefore minimizing any impact to the environment.

Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.



FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: 70467 Location: SAN JUAN 29-6 #6-21 Operator #: 7035 Operator Name: PHILLIPS P/L District: BloomπειΔ Coordinates: Letter: K Section 21 Township: 29 Range: 6 Or Latitude Longitude Pit Type: Dehydrator X Location Drip: Line Drip: Other: Site Assessment Date: 5.27.94 Area: 10 Run: 61						
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps) Inside Outside Outside Depth to Groundwater Less Than 50 Feet (20 points) Greater Than 100 Ft (0 points) Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction?, or; ls it less than 200 ft from a private domestic water source? Horizontal Distance to Surface Water Body Less Than 1000 Ft (10 points) (2) Greater Than 200 Ft (20 points) (3) Horizontal Distance to Surface Water Body Less Than 200 Ft (10 points) (3) Name of Surface Water Body (5) (5) (5) (5) (5) (5) (6) (7) (7) (7) (7) (8) (9) (9) (9) (9) (9) (9) (9						
	(Surface Water Body: Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream (1) < 100'(Navajo Pits Only) (2) > 100' TOTAL HAZARD RANKING SCORE: POINTS						
REMARKS	Remarks: Two PITS ON LOCATION, WILL CLOSE ONLY ONE. PIT IS DRY LOCATION IS NORTH OF HWY 64 TO DUCCE REDUNE AND TOPO CONFIRMED LOCATION IS OUTSIDE V.Z. PUSH IN						

	ORIGINAL PIT LOCATION				
	Original Pit : a) Degrees from North <u>277°</u> Fo b) Length : <u>27'</u> Width :	otage from Wellhead 94'			
ORIGINAL PIT LOCATION	27' 94' WELLHEAD				
	Remarks: TOOK PICTURES AT 9:21 A.M. END DUMP				
RKS					
REMARKS					
	Completed By:				
	Fort Champson	5.27.9 4			
	Signature	Date			

· 大學的學生 1000 (1000)

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: 70467 Location: SAN JUAN 29-6 6-21 Coordinates: Letter: K Section 21 Township: 29 Range: 6 Or Latitude Longitude Longitude Date Started: 6-30-99 Area: 10 Run: 61					
FIELD OBSERVATIONS	Sample Number(s): MK 7/ Sample Depth: Feet Final PID Reading PID Reading Depth Feet Yes No Groundwater Encountered					
CLOSURE	Remediation Method: Excavation					
REMARKS	Remarks: FING lines Marked 50:1 1:9ht Gray 51:9ht HYDrocarbon odor Hit sand stone 9' Signature of Specialist: Morgan Killion					



FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

SAMPLE NUMBER: MTR CODE SITE NAME: SAMPLE DATE TIME (Hrs): SAMPLED BY: DATE OF THE EXT. ANAL.: TYPE DESCRIPTION: REMARKS: RESULTS RESULT UNITS CUALIFIERS DF Q M(g) V(n) MG/KG ETHYL BENZENE MG/KG TOTAL XYLENES MG/KG TOTAL STEX MG/KG TOTAL BTEX TOTAL BTEX TPH (418.1) ISSO MG/KG PERCENT SOLIDS -TPH is by EPA Method 418.1 and STEX is by EPA Method 8020 - PS Surrogate Recovery was at retive:						•	
MTR CODE SITE NAME: SAMPLE DATE TIME (Hrs): SAMPLED BY: DATE OF THE EXT. ANAL.: TYPE DESCRIPTION: REMARKS: RESULTS		Field	ID		Lab ID		
MTR CODE SITE NAME: SAMPLE DATE TIME (Hrs): SAMPLED BY: DATE OF THE EXT. ANAL.: TYPE DESCRIPTION: REMARKS: RESULTS	SAMPLE NUMBER:	mx 71		945			
SAMPLED BY: SAMPLED BY: SAMPLED BY: DATE OF TPH EXT. ANAL.: TYPE DESCRIPTION: REMARKS: RESULTS RESULT UNITS OUALIFIERS DF Q M(g) V(n) BENZENE MG/KG FOULUENE MG/KG MG/KG MG/KG TOTAL XYLENES TOTAL XYLENES TOTAL BTEX MG/KG MG/KG TPH (418.1) MG/KG PPM PERCENT SOLIDS RESULT MG/KG ANG/KG PPM PERCENT SOLIDS RESULTS ANG/KG ANG	MTR CODE SITE NAME:		7				
DATE OF TPH EXT. ANAL.: TYPE DESCRIPTION: REMARKS: RESULTS RESULTS RESULTS RESULTS RESULTS RESULTS OF Q M(g) V(n Mg/KG TOLUENE MG/KG ETHYL BENZENE MG/KG TOTAL XYLENES MG/KG TOTAL XYLENES MG/KG TOTAL BTEX MG/KG TOTAL BTEX MG/KG TPH (418.1) 1550 MG/KG PERCENT SOLIDS PERCENT SOLIDS PERCENT SOLIDS - TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 - D A M for this sample All QA/QC was acceptable.	SAMPLE DATE TIME (Hrs):			1030			
PARAMETER RESULT UNITS QUALIFIERS PARAMETER RESULT UNITS QUALIFIERS DF Q M(g) V(n BENZENE MG/KG TOLUENE MG/KG ETHYL BENZENE MG/KG TOTAL XYLENES MG/KG TOTAL BTEX MG/KG TOTAL BTEX MG/KG TPH (418.1) 1550 MG/KG PERCENT SOLIDS PERCENT SOLIDS - TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 – C Surrogate Recovery was at NA A N JA Tan Bank Time Sand Jank W(g) V(n A M(g) V(n A	SAMPLED BY:		٨	I/A	. 377		
RESULTS RESULT UNITS QUALIFIERS DF Q M(g) V(n MG/KG TOLUENE MG/KG MG/KG TOTAL XYLENES MG/KG TOTAL BTEX MG/KG TOTAL BTEX MG/KG TPH (418.1) MG/KG PPM PERCENT SOLIDS SUITOGATE RECOVERY WAS AT NIA MG/KG All QA/QC was acceptable.	DATE OF TPH EXT. ANAL.:	771	74	7/7/94			
RESULTS PARAMETER RESULT UNITS QUALIFIERS DF Q M(g) V(n BENZENE MG/KG TOLUENE MG/KG ETHYL BENZENE MG/KG TOTAL XYLENES MG/KG TOTAL BTEX MG/KG TPH (418.1) [550 MG/KG 2.05 38 HEADSPACE PID 70 MG/KG PERCENT SOLIDS 865 % -TPH is by EPA Method 418.1 and BTEX is by EPA Method 6020 -	DATE OF BTEX EXT. ANAL.:	NIA					.
PARAMETER RESULT UNITS QUALIFIERS DF Q M(g) V(n BENZENE MG/KG TOLUENE MG/KG MG/KG TOTAL XYLENES MG/KG TOTAL BTEX MG/KG TOTAL BTEX MG/KG TPH (418.1) MG/KG TPH (418.1) MG/KG TPH (418.1) MG/KG AND	TYPE DESCRIPTION:	VG	VG TanlBrown fine		Sand/C	Ay	
PARAMETER RESULT UNITS QUALIFIERS DF Q Mtg) V(n BENZENE MG/KG	REMARKS:						
BENZENE MG/KG TOLUENE MG/KG ETHYL BENZENE MG/KG TOTAL XYLENES MG/KG TOTAL BTEX MG/KG TPH (418.1) ISSO MG/KG HEADSPACE PID ZOY PPM PERCENT SOLIDS Surrogate Recovery was at DF Q M(g) V(n) MG/KG MG/KG DF Q M(g) V(n) MG/KG DF Q MG/KG DF Q M(g) V(n) MG/KG DF Q MG/KG DF Q M(g) V(n) MG		F	RESULTS				
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TOTAL XYLENES MG/KG MG/KG MG/KG TPH (418.1) 1550 MG/KG HEADSPACE PID 204 PPM PERCENT SOLIDS 865 % - TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 - Surrogate Recovery was at N(A) % for this sample All QA/QC was acceptable.							
TOTAL BTEX MG/KG TPH (418.1) 1550 MG/KG 2.05 HEADSPACE PID PERCENT SOLIDS 865 -TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 - E Surrogate Recovery was at NAME of this sample All QA/QC was acceptable.	ETHYL BENZENE		MG/KG				
TPH (418.1) Some content of the c	TOTAL XYLENES		MG/KG				
HEADSPACE PID 204 PPM PERCENT SOLIDS 865 % -TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 - E Surrogate Recovery was at NAME of this sample All QA/QC was acceptable.	TOTAL BTEX		MG/KG				
PERCENT SOLIDS 86.5 % - TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 e Surrogate Recovery was at NA % for this sample All QA/QC was acceptable.	TPH (418.1)	1550	MG/KG			2.05	28
- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 - e Surrogate Recovery was at \(\frac{\mathcal{D} \left(\beta \)}{\text{D} \left(\beta \)} \) for this sample All QA/QC was acceptable.	HEADSPACE PID	304	PPM				
e Surrogate Recovery was atN for this sample All QA/QC was acceptable.	PERCENT SOLIDS						
					was accep	table.	

Date:

= Dilution Factor Used

onroved By:

********************* Test Method for Oil and Grease and Petroleum Hydrocarbons in Water and Soil

Perkin-Elmer Model 1600 FT-IR Analysis Report

24/07/07 14:04

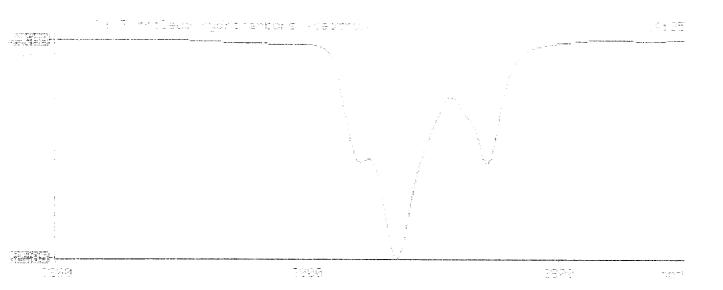
Sample identification 145547

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McLume of sample after extraction, milescope

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