

*Risk-bedrock*

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

**RECEIVED**  
DEC - 6 1999

**PIT REMEDIATION AND CLOSURE REPORT**

**OIL CON. DIV.**  
**DIST. 3**

Operator: Taurus (Williams Field Services) Telephone: (801) 584-6361  
Address: P.O. Box 58900, Salt Lake City, Utah 84158-0900  
WellName: CHENEY FED # 1 ( 86181 )  
Location: Unit or Qtr/Qtr Sec *M* Sec 8 T 26N R 2W County Rio Arriba  
PitType Dehy  
LandType: BLM

Pit Location: Pit dimensions: length 13 ft., width 20 ft., depth 2 ft.  
(Attach diagram)

Reference: Wellhead

Footage from reference: 84 ft.

Direction from reference: 72 Degrees East of North

Depth To Ground Water:	Less than 50 feet	(20 points)
(Vertical distance from	50 feet to 99 feet	(10 points)
contaminants to seasonal	Greater than 100 feet	(0 points) <u>0</u>
high water elevation of		
ground water)		

Wellhead Protection Area:	Yes	(20 points)
(Less than 200 feet from a private	No	(0 points) <u>0</u>
domestic water source, or less than		
1000 feet from all other water sources)		

Distance To Surface Water:	Less than 200 feet	(20 points)
(Horizontal distance to perennial	200 feet to 1,000 feet	(10 points)
lakes, ponds, rivers, streams, creeks,	Greater than 1,000 feet	(0 points) <u>0</u>
irrigation canals and ditches)		

Ranking Score (TOTAL POINTS): 0

Date Remediation Started: 7/31/98

Date Completed: 7/31/98

Remediation Method: Excavation ☒

Approx. Cubic Yard 20

(check all appropriate sections)

Landfarmed ☒Insitu Bioremediation ☐

Other Landfarmed soil after mechanical aeration. LF Headspace 7ppm

Remediation Location: Onsite ☒ Offsite

(ie. landfarmed onsite, name and location of offsite facility)

## General Description Of Remedial Action:

The pit was excavated to remove gross petroleum contamination. The excavated material was mechanically aerated and placed into an onsite landfarm.

Ground Water Encountered: No

Final Pit:

Sample location CHENEY #1-V-EXFL-01

Closure Sampling:

Two samples were collected, one sample from the excavation bottom and the second sample was made up of 4 points from each excavation wall.

(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample depth

Sample date 8/1/98

Sample time 11:14

Sample Result

Benzene (ppm) &lt;0.050

Total BTEX (ppm) 6.015

Field Headspace (ppm)

TPH (ppm) 1770

Ground Water Sample: No

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 10-1-99 Rev

SIGNATURE

PRINTED NAME Mark Harvey for Williams Field Services  
AND TITLE PROJECT COORDINATOR



Environmental Services  
P.O. Box 58900  
Salt Lake City, UT 84158-0900

### **Pit Closure and Retirement Addendum- Risk Assessment**

Any residual contamination remaining at the Cheney Federal #1 poses low risk to human health and the environment. This conclusion is based in part on the information below:

#### **Toxicity Information**

Toxicity values for TPH have not been established due to the variability of the chemical makeup of TPH. Normally, the toxicity is based on the toxicity of the particular constituents of concern which may be present and are evaluated based on health-based standards. The most common constituents examined include benzene, ethylbenzene, toluene, and xylene.

In the absence of constituents of concern or when the concentrations of the constituents of concern are negligible, the acceptable level of TPH is established by considering the following:

- No liquid product should remain in the soil
- The TPH should not harm vegetation
- The TPH concentrations should not create an odor nuisance
- Hydrocarbon vapors which may emanate from the impacted soil should not generate harmful or explosive vapors
- Site monitoring should indicate that TPH levels are stable or declining

While residual TPH and / or BTEX contamination may exist at this site, excavation activities were suspended based on encountering bedrock or production equipment which limited continued safe excavation. Based on the analysis of the soil confirmation sample and the site conditions, closure of this site is warranted for the following reasons:

1. Soils which exhibited high levels of TPH and BTEX have been removed.
2. Residual TPH concentrations are below levels which would be problematic based on the criteria above.
3. Discharge has been eliminated and a steel tank installed to prevent any future release to soils.
4. Depth to groundwater is estimated at greater than 100'.
5. Vertical migration of contamination is limited due to bedrock and/or the low vertical hydraulic conductivity of underlying soils.
6. TPH concentrations will not increase and are likely to degrade over time in-situ.

**Since there are no nearby receptors or domestic water sources, this site poses little risk to human health and the environment. Closure is justified based on the relatively low total petroleum hydrocarbon (TPH) concentration and the fact that benzene, toluene, ethylbenzene, and xylene meet applicable closure criteria. Additional information may be found in the Technical Background Document titled: *Risk Based Closure of Unlined Surface Impoundment Sites, San Juan Basin, New Mexico.***

# PIT RETIREMENT FORM

86181

~ 80°

Date: 7/31/98

Weather mostly cloudy - scattered showers

Well Name CHENEY FEDERAL #1 Operator TAURUS Sec 8 T 26N R 2W UL

Land Type: BLM STATE FEE INDIAN County RIO ARriba

One Call Made (505-765-1234)? (Y) N

Line Marking Evident? (Y) N

## Pit Location:

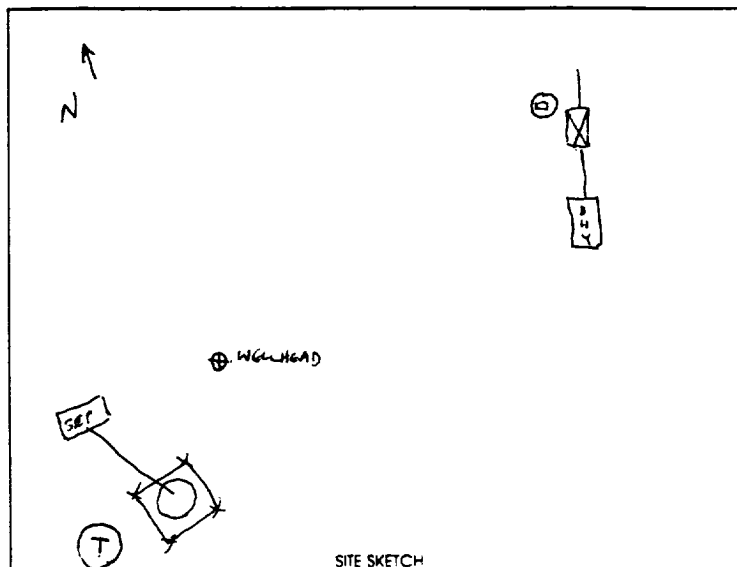
Reference Wellhead X Other

Distance from: 84

Direction: 72 Degrees X E N X of  
W S

Starting Pit Dimensions 11' x 12' x 1'

Final Pit Dimensions 13' x 20' x 2'



## Organic Vapor Readings:

Start   
@ 2'   
@ 4'   
@ 6'   
@ 8'   
@   
@

## Soil Description:

SILTY SAND & ROCK  
SANDSTONE

Well Proximity To: Residence, Domestic Water Well, Stock Well NONE

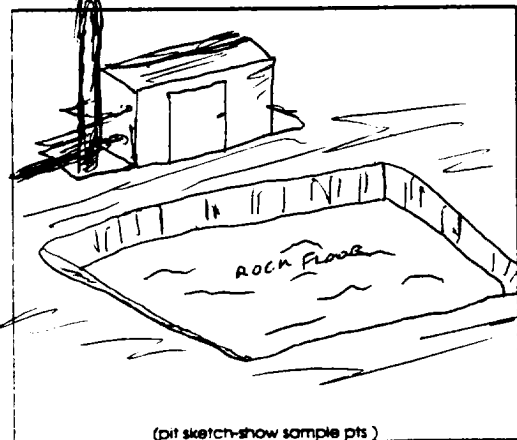
Arroyo, Wash, Lake, Stream NONE

Estimated or Known Distance to Ground Water >100'

Source of Backfill (if other than processed material)

Samples collected: Type Progress: Verification: ID  soil / water  
Progress: Verification: ID  soil / water  
Progress: Verification: ID  soil / water

Sample sent to Lab Via: Courier Hand Carried Other  Preservative: ICE Other



Comments: SET UP AFTER TRACKING FROM LINE DRIP - HIT ROCK  
IMMEDIATELY - PLACE SOIL IN ON-SITE LANDFARM - FLOOR HAS  
SOME STAINING + SOME ODOR -

OCN SITE

Soil Shipped to: ON-SITE LANDFARM

Prepared by: WJZ

## Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

## LABORATORY REPORT:

REFERENCE #: 9808213

SENT WILLIAMS FIELD SERVICE-MS4JI  
TO: P.O. BOX 58900  
SALT LAKE CITY, UTAH 84108  
MARK HARVEY  
PROJECT: JICARILLA DISTRICT '98

DATE REPORTED: 08/14/98  
DATE COLLECTED: 08/01/98  
DATE RECEIVED: 08/07/98

Reference Fraction: 9808213-13A  
Sample ID: CHENEY #1-V-EXWA-01 / 86181  
Sample Date Collected: 08/01/98 11:07:00

Sample Matrix: SOIL

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
BTEX	SW846 8021			3.0		
BENZENE		ND	MG/KG	0.050	08/12/98	JLO
TOLUENE		0.104	MG/KG	0.050	08/12/98	JLO
ETHYLBENZENE		0.104	MG/KG	0.050	08/12/98	JLO
TOTAL XYLENES		1.62	MG/KG	0.050	08/12/98	JLO
BFB (SURROGATE)		100	125	75		
TPH	SW846-8015	585	MG/KG	40.0	08/13/98	SKW

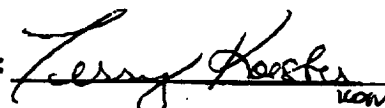
ND=NONE DETECTED

DL=DETECTION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER  
LABORATORY DIRECTOR

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TO: P.O. BOX 58900  
SALT LAKE CITY, UTAH 84108  
MARK HARVEY  
PROJECT: JICARILLA DISTRICT '98

DATE REPORTED: 08/14/98  
DATE COLLECTED: 08/01/98  
DATE RECEIVED: 08/07/98

Reference Fraction: 9808213-14A  
Sample ID: CHENEY #1-V-EXFL-01 / 86181  
Sample Date Collected: 08/01/98 11:14:00

Sample Matrix: SOIL

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
BTEX	SW846 8021			3.0		
BENZENE		ND	MG/KG	0.050	08/12/98	JLO
TOLUENE		0.355	MG/KG	0.050	08/12/98	JLO
ETHYLBENZENE		ND	MG/KG	0.050	08/12/98	JLO
TOTAL XYLENES		5.66	MG/KG	0.050	08/12/98	JLO
BFB (SURROGATE)		124	125	75		
TPH	SW846-8015	1770	MG/KG	40.0	08/13/98	SKW

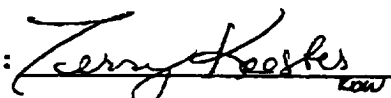
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Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 9809246

SENT WILLIAMS FIELD SERVICE-MS4JI  
TO: P.O. BOX 58900  
SALT LAKE CITY, UTAH 84108  
MARK HARVEY

DATE REPORTED: 09/11/98  
DATE COLLECTED: 09/03/98  
DATE RECEIVED: 09/05/98

PROJECT: PIT REMEDIATION '98

Reference Fraction: 9809246-11A

Sample ID: CHENEY FED#1 V-LF-01 / 86181

Sample Matrix: SOIL

Sample Date Collected: 09/03/98 16:42:00 HS 12

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
TPH	SW846-8015	970	MG/KG	40.0	09/09/98	SKW

ND=NONE DETECTED

DL=DETECTION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:

TERRY KOESTER  
LABORATORY DIRECTOR