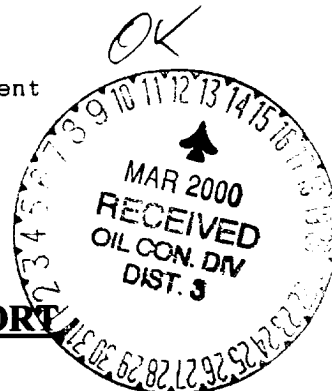


State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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



PIT REMEDIATION AND CLOSURE REPORT

Operator: Dugan Petroleum (Williams Field Services) Telephone: (801) 584-6361
Address: P.O. Box 58900, Salt Lake City, Utah 84158-0900
WellName: SHERMAN #2 LINE DRIP (LDSH#2)
Location: Unit or Qtr/Qtr Sec E Sec 3 T 29N R 5W County Rio Arriba
PitType Drip
LandType: BLM

Pit Location: Pit dimensions: length 14 ft., width 13 ft., depth 13 ft.
(Attach diagram)

Reference: Wellhead

Footage from reference: 35 ft.

Direction from reference: 158 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>20</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): 20

Date Remediation Started: 9/17/98

Date Completed: 9/17/98

Remediation Method: Excavation ☒

Approx. Cubic Yard 90

(check all appropriate
sections)Landfarmed ☒Insitu Bioremediation ☐

Other Landfarmed soil after mechanical aeration. LF Headspace 40ppm

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. Returned to site 2/15/00 and advanced sampling probe to 15' to collect sample. Results: TPH ND BTEX ND

Ground Water Encountered: No

Final Pit:

Sample location SHERMAN#2LD-V-EXFL-01

Closure Sampling:

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

Sample depth 13 feet

Sample date 9/18/98

Sample time 10:15

Sample Result

Benzene (ppm) <0.050

Total BTEX (ppm) <0.050

Field Headspace (ppm)

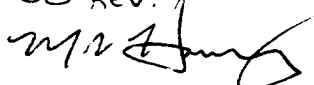
TPH (ppm) 8.71

Ground Water Sample: No

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

DATE 3-7-00 REV. 1

SIGNATURE



PRINTED NAME Mark Harvey for Williams Field Services
AND TITLE

1 DSH #2

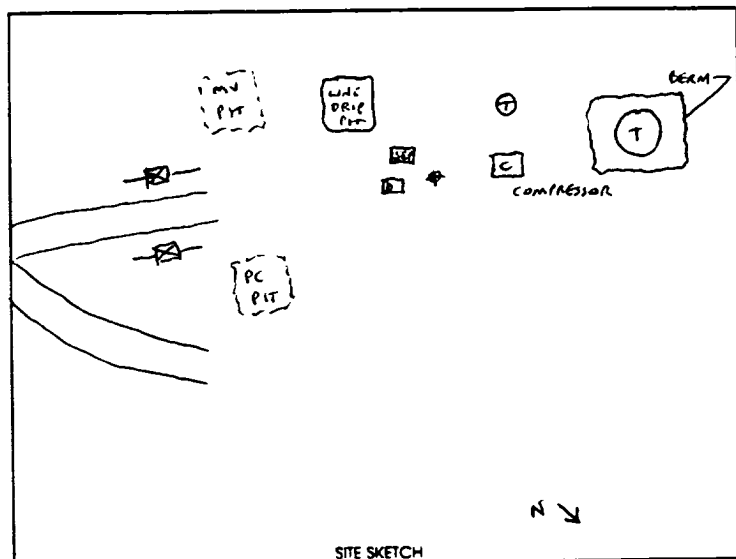
Weather Sunny ~ 78°

County RIO ARIZONA

Y N

~~Y~~ N

Final Pit Dimensions 13' x 14' x 13'



Soil Description: SILTY SAND
" "
" "
" "
" "
" "
" " W/CLAY

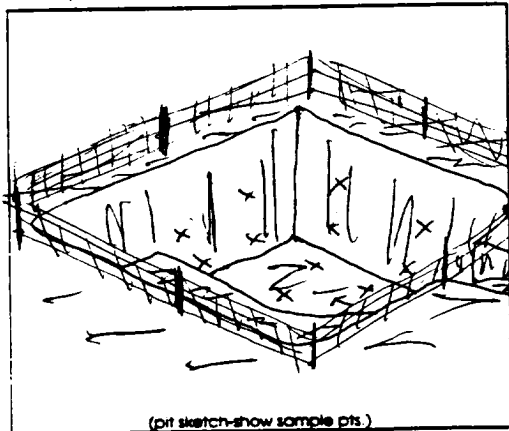
Well Proximity To: Residence, Domestic Water Well, Stock Well ~ 350 Yds South
Arroyo, Wash, Lake, Stream LA JARA ~ 150 Yds West
Estimated or Known Distance to Ground Water 15' - 25'

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: 3RD OF 3 PITS DUG ON THIS LOCATION — SITE ACROSS LA JARA WASH ON NORTH SIDE — SOIL HAS SLIGHT TO MODERATE HYDROCARBON ODOOR WHICH DIMINISHES @ ~ 10' — SIDEWALLS HAVE ONLY SLIGHT STAINING — CUT OUT STAINING IN NW CORNER — BIT GENERALLY CLEAN — CUT BECH — RAMP + LEAVE FENCE — SHAED SOIL + LAWFARM — BERM

Soil Shipped to: ON-SITE / LF

Prepared by: M. J. [Signature]

QWAL LABORATORIES, INC.

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

LABORATORY REPORT:

REFERENCE #: 8402596

SENT WILLIAMS FIELD SERVICE
TO: 295 CHIPETA WAY
SALT LAKE CITY, UTAH 84158
MARK HARVEY
PROJECT: WFS/NM-PITS

DATE REPORTED: 02/23/00
DATE COLLECTED: 02/15/00
DATE RECEIVED: 02/18/00

Reference Fraction: 8402596-03A
Sample ID: SHERM#2 LD-EX-RS-01(LDSH#2
Sample Date Collected: 02/15/0012:08:00

Sample Matrix: SOIL

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
TPH-DRO	SW846-8015D	ND	MG/KG	2	02/22/00	BEM
BTEX	OA1/8021B			3.0		
BENZENE		ND	MG/KG	0.050	02/21/00	KKL
TOLUENE		ND	MG/KG	0.050	02/21/00	KKL
ETHYLBENZENE		ND	MG/KG	0.050	02/21/00	KKL
TOTAL XYLENES		ND	MG/KG	0.050	02/21/00	KKL
BFB (SURROGATE)		109	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TKOESTER

TERRY KOESTER
LABORATORY DIRECTOR

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 #: 9809684

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

DATE REPORTED: 09/28/98
DATE COLLECTED: 09/18/98
DATE RECEIVED: 09/22/98

Reference Fraction: 9809684-01A
Sample ID: SHERMAN#2LD-V-EXFL-01
Sample Date Collected: 09/18/98 10:15:00

Sample Matrix: SOIL

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
TPH	SW846-8015	8.71	MG/KG	2.0	09/25/98	SKW
BTEX	SW846 8021			3.0		
BENZENE		ND	MG/KG	0.050	09/23/98	JLO
TOLUENE		ND	MG/KG	0.050	09/23/98	JLO
ETHYLBENZENE		ND	MG/KG	0.050	09/23/98	JLO
TOTAL XYLENES		ND	MG/KG	0.050	09/23/98	JLO
BFB (SURROGATE)		94	125	75		

NONE DETECTED
DL=DETECTION LIMIT
SU=STANDARD UNITS
B=DETECTED IN METHOD BLANK

APPROVED BY:


TERRY KOESTER
LABORATORY DIRECTOR

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 #: 9809684

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

DATE REPORTED: 09/28/98
DATE COLLECTED: 09/18/98
DATE RECEIVED: 09/22/98

Reference Fraction: 9809684-02A
Sample ID: SHERMAN#2LD-V-EXWA-01
Sample Date Collected: 09/18/98 10:15:00

Sample Matrix: SOIL

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
TPH	SW846-8015	62.9	MG/KG	2.0	09/25/98	SKW
BTEX	SW846 8021			3.0		
BENZENE		ND	MG/KG	0.050	09/23/98	JLO
TOLUENE		ND	MG/KG	0.050	09/23/98	JLO
ETHYLBENZENE		ND	MG/KG	0.050	09/23/98	JLO
TOTAL XYLENES		ND	MG/KG	0.050	09/23/98	JLO
BFB (SURROGATE)		76	125	75		

NONE DETECTED
DL=DETECTION LIMIT
SU=STANDARD UNITS
B=DETECTED IN METHOD BLANK

APPROVED BY:


TERRY KOESTER
LABORATORY DIRECTOR

QWAL LABORATORIES, INC.

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

LABORATORY REPORT:**REFERENCE #:** 9905122

SENT WILLIAMS FIELD SERVICE
TO: 295 CHIPETA WAY
SALT LAKE CITY, UTAH 84158
MARK HARVEY

DATE REPORTED: 05/19/99
DATE COLLECTED: 04/29/99
DATE RECEIVED: 05/05/99

PROJECT: NM PITS

Reference Fraction: 9905122-02A
Sample ID: SHERM #2-LD-LF LASH#2
Sample Date Collected: 04/29/99 10:38:00

Sample Matrix: SOIL

TEST	METHOD	RESULT	UNITS	PQL	ANALYSED BY
TPH	SW846-8015	9.93	MG/KG	2	05/10/99 KKL

ND-NONE DETECTED
PQL-PRACTICAL QUANTITATION LIMIT
SU-STANDARD UNITS
B-DETECTED IN METHOD BLANK

APPROVED BY:


PERRY KOESTER
LABORATORY DIRECTOR