DEPUTY OIL & GAS INSPECTOR

AUG 0 9 1999

Jicarilla Apache Tribe **Environmental Protection Office** Pit Remediation and Closure Report



OIL CON. DIV. DIST. 3

| Operator: | Taurus Explorat | ion U.S.A., | Inc Teler | hone: | (505) | 325-6800 | | |
|-------------------|----------------------|--------------|--------------|---------------------------------------|----------|---------------------------|-----|----------------|
| Address. | 2198 Bloomfield | | | | <u> </u> | | | |
| Facility or Wel | | Jicarilla 55 | | | | | | |
| Location: | Unit or Qtr/QTR | Sec "K" S | ec 35, T 23 | N, R3W | Coun | ty | Rio | Arriba |
| Pit Type: | Separator: | Dehydrato | | | | Separator | | |
| Land Type: | Range | | | | | | | |
| | | | | | | | | |
| Pit Location: | Pit dimensions: | length: 25 | ft width | 45 ft | depth | : 11 ft | | |
| (Attach Diagra | m) | | | · · · · · · · · · · · · · · · · · · · | <u> </u> | | - | |
| | Reference: | wellhead:) | X other: | | | | | |
| Foota | ge from reference: | 100 fee | et | | | | - | |
| Directi | on from reference: | 40 | Degre | es | East | North | X | |
| | | | | | | of | | |
| | | | | X | West | South | | |
| Depth To Grou | ndwater: | | 10004 | on 50 f | | /OO - | | 177 |
| (Vertical distan | | | | ian 50 feet to 99 feet | | (20 points) | | |
| contaminants to | | | Greater tha | | | (10 points) | | ^ |
| high water elev | | | Gleater tha | in 100 reet | | (0 points) | | 0 |
| groundwater) | 4.101,00 | | | | | | | |
| | | | | | | | | |
| 15 | Ephemeral Stream | | | n 100 feet | | (10 points) | | |
| 16 | dry wash greater th | nan | Greater tha | n 100 feet | | (0 points) | | 0 |
| ten feet in width | ١) | | | | | | | |
| Distance to Nea | arest Lake, Playa, (| or Watering | less tha | n 100 feet | , | '10 nointa\ | | |
| 1 | adient lakes, playa | _ | Greater Tha | | , | (10 points) (0 points) | | 0 |
| 1 | dife watering pond | | orcator ma | 11 100 1661 | | (o points) | | 0 |
| | | | | | | | | |
| Wellhead Prote | | | | Yes | (| 20 points) | | |
| ſ | feet from a private | | | No | | (0 points) | | 0 |
| | source, or less tha | | | | | · | - | |
| 1000 feet from a | all other water sour | ces) | | | | | | |
| Distance To Su | rface Water: | | Less that | n 100 feet | 1 | 20 points) | | |
| | ance to perennial | | 100 feet to | | | 10 points) | | |
| | vers, streams, cree | ks. G | Greater than | | ' | (0 points) | | 0 |
| irrigation canals | | , | | | | (a bound) | | |
| | | | RANKING | SCORE (1 | TOTAL | SCORE): | | 0 |

Jicarilla Apache Tribe **Environmental Protection Office** P.O. Box 507 Dulce, New Mexico 87528

Pit Remediation and Closure Report

| | | | |
|----------------------------------|---------------------------------------|--------------------|----------------------------------|
| Date Remediation Started: | 8/13/98 | Date Completed | d 8/17/98 |
| Remediation Method: | Excavation: | Х | Approx. cubic yaı 436 |
| (Check all appropriate | Landfarmed: | X | Insitu Bioremediation: |
| sections) | Other: | | |
| Remediation Location: | On-site: | X | Off-site: |
| (I.e. landfarmed on site, | | | |
| name and location of | | | |
| off site location) | | | |
| General Description of Remedial | Action: | Soil was excava | ated and landfarmed on location. |
| | | | |
| Groundwater Encountered: | No: X | Yes: | Depth: |
| Final Pit | Sample location | : East wall @ 9 fe | eet below surface . Pit Bottom & |
| Closure Sampling: | | | ice (see attachment). |
| (If multiple samples, | | ′ | |
| attach sample results | | - U | |
| and diagram of sample | Sample depth: | 9 feet | |
| locations and depths.) | Sample date: | 8/17/98 | Sample time: 1320 |
| Sample Results: | · · · · · · · · · · · · · · · · · · · | | Completine. |
| Soil: | | | Water: |
| Benzene (ppm) | | - | Benzene (ppb) |
| Total BTEX (ppm) | | * | Toluene (ppb) |
| Field Headspace (ppm) | | - Eti | hylbenzene (ppb) |
| TPH (ppm) | | - | otal Xylenes (ppb) |
| Groundwater Sample: | Yes: | | No: X |
| (If yes, attach sample results.) | | | |
| · | | | |
| HEREBY CERTIFY THAT TH | E INFORMATION | ON ABOVE IS T | RUE AND COMPLETE TO |
| THE BEST OF MY KNOWLED | GE AND BELIE | =F | TOP MAD COMM ELTE 10 |
| | | m1 | |
| DATE: 8/31/98 | | | Frank McDonald |
| | | | Trank Webbilaid |
| SIGNATURE: | 1/2// 1/ | AND TITLE | Env. Division Manager |
| - Cypro-c | 14014 | 71110 171 1-1-1 | Liv. Division Manager |
| AFTER REVIEW OF THE PIT | CLOSURE INF | ORMATION PIT | CLOSUBE IS ADDROVED |
| IN ACCORDANCE TO THE JIC | CARILLA APAC | HE TRIRE DIT | CLOSURE IS APPROVED |
| | JANIELA AL AU | ME HADEFIL | CLUSURE URDINAINCE |
| APPROVED: Yes: X | No: | (Reason) | |
| , | 140. | (Neason) | |
| SIGNED: Lanc m | | | DATE: 9-2-98 |
| | | | |

| / Bedrock, / Bedrock/ | bearlow / |
|------------------------------------|--|
| 4-3 , 10.ft | 1 5 2 10 ft |
| Pit Profile : East to West : | Pit Profile : North to South : North South |
| Road/Entrance | A sample from the east wall @ 9' was sent to IML for GRO/DRO analysis. |
| | Comments: Top soil - 11' Soil is dry, gray/maroon, clay - shale with some black staining and a strong hydrocarbon odor. 11' Bedrock |
| Simare Gradient Wellhand | 5000 |
| Pit Tank | No S |
| | >1000' |
| () Separator | 11 |
| | Final Size : 25' x 45' x 11' deep 4 W. Wall @ 9' 3.8 |
| Earthen Pit | S. Wall @ 9' |
| - | Reference: 100' N 40 W 1 N. Wall 69 3.1 |
| Meter Run | Range: 3 W Township: 23 N |
| ,20#, | |
| | Location: Jicarilla 55 # 1 |
| Overview of Location and Sampling: | |
| | |

Environmental Specialist: __YC__

Cimarron Oilfield Services

Page __1__of__1

2506 W. Main S Farmington, New Mexico 8;

Frank McDonald Cimarron Oilfield Service Co. P. O. Box 3235 Farmington, NM 87401

August 24, 1998

Mr. McDonald:

Enclosed, please find the reports for the samples submitted for Taurus Exploration to our laboratory on August 18, 1998.

If you have any questions about the result of these analyses, please don't hesitate to call at your convenience.

We appreciate your business!

Snaron Williams

Organics Lab Supervisor

Enclosure

xc: File

COPY

2506 W. Main Street Farmington, New Mexico 87401

DIESEL RANGE ORGANICS - DRO

Taurus Exploration U.S.A., Inc.

Project ID:

Jicarilla 55-1 Sep. Pit

Sample ID: Lab ID:

E. Wall @9' 0398G04562

Sample Matrix:

Soil

Condition:

Cool/Intact

Report Date:

Date Sampled:

08/24/98 08/17/98

Date Received:

08/18/98

Date Analyzed:

08/20/98

| Diesel-Range Petroleum Hydrocarbons | <5.0 | 5.0 malka |
|-------------------------------------|--------|-----------------|
| TPH DIESEL-RANGE (MOD EPA 8015) | RESULT | DETECTION LIMIT |
| | | |

₹∂.0

5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

Reported By:



2506 W. Main Stree Farmington, New Mexico 87401

GASOLINE RANGE ORGANICS - GRO

Taurus Exploration U.S.A., Inc.

Project ID:

Jicarilla 55-1 Sep. Pit

Sample ID: Lab ID:

E. Wall @ 9' 0398G04562

Sample Matrix:

Soil

Condition:

Cool/Intact

Report Date:

08/24/98 Date Sampled:

Date Received:

08/17/98 08/18/98

Date Analyzed:

08/20/98

| Gasoline-Range Petroleum Hydrocarbons | <5.0 | 5.0 mg/kg |
|---------------------------------------|--|-----------------|
| | RESULT | DETECTION LIMIT |
| TPH GAS-RANGE (MOD EPA 8015) | Michigan and and | |
| | | |
| | | |
| | 5000 F 1000 F 10 | |

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

Reported By:





CHAIN OF CUSTODY RECORD

| 1633 Terra Avenue 1701 Ph Sheridan, Wyoming 82801 Gillette, 1 Telephone (307) 672-8945 Telephor | | | Relinquished by (Signature) | , 2 | Bolinari Start Land | reinquisited by: (Signature) | | RODW | | | | | Sic SS-1 E. Willey 8/17/98 | Sample No./ Identification | The Control of the Co | Client/Project Name Tourns Explocation US Sampler (Signature) |
|---|-----------------------------------|-------------------------------------|-----------------------------|--------------------------|---------------------|------------------------------|--|------|-------|---------|--|--|----------------------------|-----------------------------------|--|---|
| 1701 Phillips Circle Gillette, Wyoming 82718 Telephone (307) 682-8945 | Inter-M | | | | | | | | | | | | 13:20 | Time Lab N | 5 | ISH INC |
| 2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737 | Inter-Mountain Laboratories, Inc. | Date | 319/98 | Date | 85/81/8 | Date | | | | | | | | Lab Number | Chain of Custody Tape No. | Project Location |
| Street 1: 17401 B. 126-4737 Te | oratories | Time | 127 | Time | 02.20 | Time | | | | | | | Soil | Matrix | e No. | 1 |
| 1160 Research Drive 1160 Research Drive Bozeman, Montana 59718 Telephone (406) 586-8450 | s, Inc. | Received by laboratory: (Signature) | | Received by: (Signature) | linakan Lende | Received by: (Signature) | | | | | | | | No. of Contain 8015 6 Ru | ners (DRO | Separatory 1 |
| 11183 State Hwy. 30 College Station, TX 77845 Telephone (409) 776-8945 | | nature) | | | | | | | 100 | intact | | | | | Re | ANALYSES / PARAMETERS |
| G4028 | | 8/3/98/0935 | | | 21/8/98 7:20 | Date Time | | | いくっくつ | ct hand | | | | | Remarks | RS |



CHAIN OF CUSTODY RECORD

| 1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945 | | | Helinquisned by: (Signature) | STATE CONTRACTOR | 2 | Bollowitched by 10 | inquisned by: (Signature) | | | | | | | | I. 55-1 E. WILLOG' 8/17/98 | Sample No./ Identification Date | July (Salamana) | Client/Project Name Touris Explication Sampler (Signature) |
|---|---------------------------------|------------------|------------------------------|------------------|--------------------------|-----------------------|---------------------------|--|--|-----------------|---------|---|--|--|----------------------------|---------------------------------|---------------------------|--|
| 1701 Phillips Circle Gillette, Wyoming 82718 Telephone (307) 682-8945 | Inter | | | | | | | | | | | | | | 148 13:20 | Time | | 11511 Tre |
| 2506 West 8 Farmingtor 45 Telephone | Inter-Mountain Laboratories Inc | | | | | × | | | | | | | | | - | Lab Number | Chain of Custody Tape No. | Project Lou |
| 2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737 | ahorato | | Date Time | 11-190 B Days | Date Time | 07.60 88/81/2 | Date Time | | | | | | | | 5011 | - Matrix | dy Tape No. | 1 |
| 1160 Resea Bozeman, V | rios Inc | ア で S | Received | <u> </u> | | ~ 100 | Received | | | | | | | | | rix | | Separates Pit |
| 1160 Research Drive Bozeman, Montana 59718 Telephone (406) 586-8450 | Q | () in inch | by laboratory: (Signature) | | Received by: (Signature) | | by: (Signature) | | | | | | | | | No. of Contain | ners | |
| 11183 State Hwy. 30 College Station, TX 77845 Telephone (409) 776-8945 | | | nature) | | | | | | | | | | | | | | | ANALYSES / PARAMETERS |
| wy. 30 n, TX 77845 9) 776-8945 | 91. 10. | | | | | | | | | 4.17.65 | 1 1 0 0 | | | | | · | Ren | PARAMETER |
| 54028 | 1011 | 20 12 00 10 00 N | Date | | Date | - N. C. (1.1.) | Date | | | \(\frac{1}{2}\) | L NOV 7 | _ | | | | | Remarks | 33 |
| Ö | |)a2.K | Time | | Time | \ \ \ \ \ | Time | | | | | | | | | | | |

JICARILLA APACHE TRIBE ENVIRONMENTAL PROTECTION OFFICE P.O. BOX 507 DULCE, NEW MEXICO 87528

ON-SITE SOIL REMEDIATION REPORT

| Operator: Taurus Exploration USA Inc. Telephone: (505) 325 - 6800 | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|
| Address: 2198 Bloomfield Hwy, Farming | ton N.M. 87401 | | | | | | | | | | | | |
| Facility or Well Name: <u>Jicarilla 55-1</u> | | | | | | | | | | | | | |
| Location: Unit or Qtr/Qtr Sec K Sec 35 T 23 N R 3 W County Rio Arriba | | | | | | | | | | | | | |
| Land Type: Range Date Remediation Started: 8/13/98 Date Completed: 1/14/99 | | | | | | | | | | | | | |
| Date Remediation Started: 8/13/98 Da | Date Remediation Started: 8/13/98 Date Completed: 1/14/99 | | | | | | | | | | | | |
| Remediation Method: Landfarmed X Approx. cubic yards 436 | | | | | | | | | | | | | |
| Composted | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Depth to Groundwater: (pts) 0 | Final Closure Sampling: | | | | | | | | | | | | |
| Distance to an Ephemeral Stream (pts) 0 | Sampling Date: <u>1/14/99</u> Time: <u>11:07</u> | | | | | | | | | | | | |
| Distance to Nearest Lake, Playa, or Watering Pond (pts) 0 Sample Results: | | | | | | | | | | | | | |
| Wellhead Protection Area (pts)0 | Field Headspace (ppm) <u>51</u> | | | | | | | | | | | | |
| Distance to Surface Water (pts)0 | TPH (ppm) <58 Method 8015 | | | | | | | | | | | | |
| | Other: | | | | | | | | | | | | |
| RANKING SCORE (TOTAL POINTS): 0 | | | | | | | | | | | | | |
| I HEREBY CERTIFY THAT THE INFORMATION ABO KNOWLEDGE AND BELIEF DATE: 2/2/98 PRINTED NA | | | | | | | | | | | | | |
| SIGNATURE / | AND TITLE ENV. SPECIALIST | | | | | | | | | | | | |
| | AFTER REVIEW OF THE SOIL REMEDIATION DIFORMATION. ON-SITE SOIL REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICAKILLA APACHE TRIBE PIT CLOSURE ORDINANCE. | | | | | | | | | | | | |
| SIGNED: KIECTOR DA | TE: 2-12-99 | | | | | | | | | | | | |

Size Yds: Pit Quad: Reference 55' N 75 E from Environmental Specialist : JE Comments: Location: Jicarilla 55-1 Township: ω 5 - Point Composites 436 wellhead. 110' x 35' x 3' Separator Soil is moist, light brown, sandy/loam, with some minor staining and no hydrocarbon odor. A sample from composite # 1 was sent to IML for GRO/DRO analysis. 23 N Range: Section: Sample # Location 3 ¥ 35 10 12 9 œ 6 5 ယ Comp 3 Comp 1 MVO 21 5 Overview of Landfarm and Sampling Surface Gradient N R R Product i on Tank Separator Fit Well head Separator meter run N ω Landfarm N ω ω N ω N N

Client: _

Taurus Exploration USA Inc.

Date Started: August 13, 1998 Date Completed: December 14, 1999

Ranking Score: 0_Closure Standard: 5000 ppm

Cimarron Oilfield Services

Page 1 of 1



CHAIN OF CUSTODY RECORD

| Telephone (307) 672-89 | 1633 Terra Avenue Sheridan, Wyoming 82801 |) | Relinquished by: (Signature) | riciliquisited by: (Signature) | Cical Chair | Relinquished by: (Signature) | | | | | | | 10 27 1 1 Comp # 1 | Sample No./ Identification | Might City | | Client/Project Name |
|---|--|-----------------------------------|-------------------------------------|--------------------------------|--------------------------|------------------------------|--|---|---------|---------|-------------|--|--------------------|----------------------------|---------------------------|-----------------------|--|
| | | ì | | | | | | | | | | | 1/14/190 | Date | | | |
| Telephone (307) 682-8945 | ☐ 1701 Phillips Circle Gillette, Wyoming 8 | ln. | | | | | | - | | | | | 1001 | Time | | | |
| | ∑1 250 2718 Far | ter-Mour | | | | | | | | | | | | Lab Number | Chain o | - | |
| Telephone (505) 326-4737 | Sarmington NM 87401 | Inter-Mountain Laboratories, Inc. | Date | Date | J/18/70 | | | | | | | | 120 | er | Chain of Custody Tape No. | <u> </u> | Project Location |
| 26-4737 | Street | oratori | Time | Time | > ()/ | - ! | | | | | | | | Matrix | No. | 1 1000 | |
| Telephone (406) 586-8450 | 1160 Research Drive | es, Inc. | Received by laboratory: (Signature) | Received by: (Signature) | Heceived by: (Signature) | | | | | | | | X | No. of Contain | ers | CONCY (COLVI) | |
| | | | ry: (Signature) | ure) | Ture) | | | | | | | | | | | ANALTOE | ************************************** |
| College Station, TX 77845 Telephone (409) 776-8945 | te Hwy. 30 | | | | | | | | 1000 | LOCI | N. S. Y. | | | | Re | ANALTSES / PARAMETERS | |
| () () | <u>පිරිධ 1</u> 2 | | Pate Time | Date Time | Date Time | | | | 131 000 | Lintoct | dillog 12th | | | | Remarks | :: C | j |