GW - 76

WORK PLANS

NICKELL ENVIRONMENTAL CORPORATION

ENVIRONMENTAL CONSULTING & REMEDIATION SERVICES

SITE INSPECTION CORRECTIVE ACTION PLAN

STAR TOOL COMPANY
1000 West County Road
Hobbs, NM 88240

Prepared by: Chris E. Stapp **Date:** 6/10/97
Chris E. Stapp
Project Manager
Nickell Environmental Corporation

Submitted by: David T. Taylor **Date:** 6-11-97
David T. Taylor
President
Star Tool Company

19 Barry Road • Midland • Texas • 79706 • USA • Tel: 915 520-4700 • Fax: 915 520-3844
Houston Lafayette Midland/Odessa Oklahoma City San Francisco Amarillo Denver

ACTION PLAN
STAR TOOL COMPANY
June 4, 1997

I. EFFLUENT CHARACTERIZATION

The waste water and sludge generated from steam cleaning/washing oil field rental tools have been properly characterized per 40 CFR Part 261 as non-hazardous. In addition, Star Tool Company has completed two form C138's that are currently under OCD review. When approved by the OCD, this waste will be properly disposed of per rule 7-11. (Ref. Attachment 1)

II. INSPECTION OF UNDERGROUND SUMPS

No later than June 30, 1997 all sumps at Star Tool Company will be emptied, steam cleaned, and visually inspected for integrity. The condition of each sump will be documented by photograph. This documentation will be kept on file at the facility and available for inspection by the OCD.

III. PRESSURE TESTING OF UNDERGROUND LINES

At the time of sump cleaning and inspection, Star Tool Company will hire a plumber licensed by the State of New Mexico to pressure test all underground waste water lines at the facility. The subject lines will be tested to three (3) psig above normal operating pressure. It should be noted that all underground waste water lines are gravity flow. In addition, Star Tool Company will give the OCD seventy-two (72) hours notice prior to performing this test. Documentation of the test results will be kept on file at the facility and available for inspection by the OCD.

IV. CLASS V WELL INVESTIGATION CLOSURE

Star Tool Company agrees to fully investigate the subject Class V wells in the facility parking lot. Star Tool Company will employ a driller to assist in the investigation and closure of the three wells. Each of these wells are approximately thirty-eight feet deep and twelve and one-quarter inches wide (38'D x 12.25"W). Two of them are filled with lava rock and the remaining one is open. If possible, the lava rock will be removed from the wells. If it is not possible to remove the lava rock, the driller will move out two to three feet from the existing well and drill approximately fourty-three feet. Composite samples will be collected at approximately thirty-eight to fourty-three feet directly below grade and either in or adjacent to each well. Each sample will be analyzed according to the following procedures: TCLP RCRA Metals (1311), Total Metals (6010), Reactivity (2.1.3),

Corrosivity (2.1.2), Ignitability (2.1.1), Total Petroleum Hydrocarbons (8015), Halogenated Volatile Organics (8010), Aromatic Volatile Organics (8020), and Polynuclear Aromatic Hydrocarbons (8100). If the analytical results of these samples verify contaminant levels below those specified in 20 NMAC 6.2.3103, each well will be considered clean and closed. Closure of each well will consist of filling, if open, and capping with cement to prevent any future use. Analytical documentation of samples taken during investigation will be kept on file at the facility and available for inspection by the OCD. If the analytical data indicates contamination above the criterion specified in 20 NMAC 6.2.3103, Star Tool Company will perform an additional investigation to further define the nature and extent of contamination. An additional plan for continued investigation and closure will be submitted for OCD approval at that time.

V. CHEMICAL STORAGE AND LABELING

No later than July 31, 1997, Star Tool Company will inspect all chemical storage areas to ensure:

1. All drums and other containers such as sacks, buckets, etc. containing materials other than fresh water are stored on an impermeable pad or curb type containment.
2. All onsite empty containers are stored on their sides with the bungs in place and lined up on a horizontal plane.
3. All drums and chemical containers are clearly labeled to identify their contents and other emergency information necessary if they were to rupture, spill, or ignite.

VI. WASTE FILTER DISPOSAL

Waste oil filters generated by Star Tool Company are drained for at least 30 days at the facility then retrieved and disposed of by Waste Management of Hobbs, NM. This waste has been profiled and accepted for disposal by Waste Management as non-hazardous waste. Approximately 40 to 50 waste oil filters per month are disposed of through Waste Management. (Ref. Attachment 2)

Waste paint filters generated by Star Tool Company are retrieved from the facility by Waste Management. Waste Management has profiled and accepted these filters for disposal as a non-hazardous waste. Approximately 20 to 30 waste paint filters per month

are retrieved and disposed of through Waste Management. (Ref. Attachment 2)

VII. FUEL ISLAND IMPERMEABLE LINER

Star Tool Company agrees to install an impermeable liner or curb type containment under the fuel island. Work is currently underway and scheduled to be finished no later than June 30, 1997 to install a concrete pad under and around the fuel island.

ATTACHMENT 1

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

6/10/97

TO: Chris Stapp, Nickell Environmental
FROM: Blair Leftwich, Director BL

RE: TCLP analysis of sludges bearing free oil

Sludges containing free oil are extracted for TCLP constituents by mixing the sludge and oil into a homogeneous mixture prior to removing a sample for TCLP extraction. The mixture is extracted as a whole, without separation, consequently, the extract contains contributions from both the oil and the sludge.

TRACEANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL
Attention: Terry James
19 Barry Road
Midland, TX 79706

May 29, 1997
Receiving Date: 05/21/97
Sample Type: Sludge
Project No: Sta. 501-1
Project Location: Hobbs, New Mexico

Prep Date: 05/27/97
Analysis Date: 05/27/97
Sampling Date: 05/19/97
Sample Condition: Intact & Cool
Sample Received by: JH
Project Name: Facility Assmnt & Sampling

TA#	Field Code	REACTIVITY	SULFIDES (ppm)	CYANIDES (ppm)	CORROSIVITY	pH (s.u.)	IGNITABILITY
	EPA LIMIT =	---	500	250	---	<2 >12.5	---
T73985	Sump	Non-reactive	10	30	Non-corrosive	10.3	Nonignitable
T73986	Tank	Reactive	~~640~~	~~240~~	Non-corrosive	7.9	Nonignitable
QC	Quality Control	---	---	---	---	7.0	---
RPD		0	0	0	0	0	0
% Extraction Accuracy		---	---	---	---	---	---
% Instrument Accuracy		---	---	---	---	100	---

WRONG! SEE NEXT PAGE

METHODS: EPA SW 846-2.1.3, 2.1.2, 2.1.1.
CHEMIST: JT

Director, Dr. Blair Leftwich

5-29-97
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1796
FAX 806•794•1298

6/10/97

TO: Chris Stapp, Nickell Environmental
FROM: Blair Leftwich, Director BL

RE: RCI on Sludge Sample T73986, Tank, Sta.501-1, Hobbs, NM, sampling date 5/19/97

The sample was originally screened for reactive sulfide and cyanide utilizing Drager tubes. The sample showed 640 ppm sulfide and 240 ppm cyanide. Because there are possible interferences for cyanide and sulfide utilizing Drager tubes and because there were no known sources, the sample was analyzed for cyanide and sulfide utilizing EPA methods 4500-S2-E and EPA 335.2. These methods have less interferences than previous methods, and resulted in sulfides of <8.0 ppm and cyanides of 0.8 ppm.

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL
Attention: Terry James
19 Barry Road
Midland, TX 79706

May 29, 1997
Receiving Date: 05/21/97
Sample Type: Sludge
Project No: Sta. 501-1
Project Location: Hobbs, New Mexico

Prep Date: 05/27/97
Analysis Date: 05/27/97
Sampling Date: 05/19/97
Sample Condition: Intact & Cool
Sample Received by: JH
Project Name: Facility Assmnt & Sampling

TA#	Field Code	REACTIVITY	SULFIDES (ppm)	CYANIDES (ppm)	CORROSIVITY	pH (s.u.)	IGNITABILITY
	EPA LIMIT =	---	500	250	---	<2 >12.5	---
T73985	Sump	Non-reactive	10	30	Non-corrosive	10.3	Nonignitable
T73986	Tank	Non-reactive	<8.0	0.8	Non-corrosive	7.9	Nonignitable
QC	Quality Control	---	---	---	---	7.0	---
RPD		0	0	0	0	0	0
% Extraction Accuracy		---	---	---	---	---	---
% Instrument Accuracy		---	---	---	---	100	---

METHODS: EPA SW 846-2.1.3, 2.1.2, 2.1.1, 4500-S2-E; EPA 335.2.
CHEMIST: JT/RC

Director, Dr. Blair Leftwich

5-29-97
DATE

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL
Attention: Terry James
19 Barry Road
Midland, TX 79706

May 29, 1997
Receiving Date: 05/21/97
Sample Type: Sludge
Project No: Sta. 501-1
Project Location: Hobbs, New Mexico

Extraction Date: 05/21/97
Analysis Date: 05/28/97
Sampling Date: 05/19/97
Sample Condition: Intact & Cool
Sample Received by: JH
Project Name: Facility Assmnt & Sampling

TCLP METALS (mg/L)

TA#	Field Code	As	Se	Cd	Cr	Pb	Ag	Ba	Hg
	EPA LIMIT =	5.0	1.0	1.0	5.0	5.0	5.0	100.0	0.20
T73985	Sump	<0.10	<0.10	<0.02	<0.05	<0.10	<1.0	<0.20	<0.01
T73986	Tank	<0.10	<0.10	<0.02	<0.05	<0.10	<1.0	1.5	<0.01
QC	Quality Control	4.9	4.8	5.0	5.1	4.9	0.9	5.1	0.057
Reporting Limit		0.10	0.10	0.02	0.05	0.10	1.0	0.20	0.01
RPD		2	1	2	2	1	2	1	2
% Extraction Accuracy		89	84	84	89	87	82	92	114
% Instrument Accuracy		97	96	99	101	98	96	102	93

CHEMIST: As, Se, Cd, Cr, Pb, Ag, Ba: RR Hg: DM
METHODS: EPA SW 846-1311, 6010, 7470.
TCLP METALS SPIKE: 2.0 mg/L As, Se, Ba, Cd, Cr; Pb; 1.0 mg/L Ag; 0.05 mg/L Hg.
TCLP METALS QC: 5.0 mg/L As, Se, Cd, Cr, Pb, Ba; 1.0 mg/L Ag; 0.005 mg/L Hg.

Director, Dr. Blair Leftwich

5-29-97
Date

May-29-97 12:24P

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

May 29, 1997
Receiving Date: 05/21/97
Sample Type: Sludge
Project No: Sta. 501-1
Project Location: Hobbs, New Mexico

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL
Attention: Terry James
19 Barry Road
Midland, TX 79706

Extraction Date: 05/21/97
Analysis Date: 05/27/97
Sampling Date: 05/19/97
Sample Condition: I & C
Sample Received by: JH
Project Name: Facility

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit*	T73986 Tank	QC	Assmnt & Sampling RPD	%EA	%IA
Pyridine	5.0	1.25	ND	88	1	36	110
1,4-Dichlorobenzene	7.5	1.25	ND	80	12	45	100
o-Cresol	200.0	1.25	ND	74	15	55	93
m,p-Cresol	200.0	1.25	ND	74	15	51	93
Total Cresol	200.0	1.25	ND	---	---	---	---
Hexachloroethane	3.0	1.25	ND	74	11	49	93
Nitrobenzene	2.0	1.25	ND	77	10	60	96
Hexachlorobutadiene	0.5	0.125	ND	76	13	56	95
2,4,6-Trichlorophenol	2.0	1.25	ND	79	13	65	99
2,4,5-Trichlorophenol	400.0	1.25	ND	76	13	67	98
2,4-Dinitrotoluene	0.13	0.1	ND	79	9	68	99
2,4-D	10.0	1.25	ND	83	3	49	104
Hexachlorobenzene	0.13	0.125	ND	78	4	80	98
2,4,5-TP	1.0	0.375	ND	76	2	53	95
Pentachlorophenol	100.0	1.25	ND	74	5	79	93
Chlordane	0.03	0.001	ND	0.053	23	34	106
Toxaphene	0.5	0.05	ND	2.09	1	117	105
Lindane	0.4	0.001	ND	0.0265	40	30	106
Heptachlor	0.008	0.001	ND	0.027	35	34	108
Heptachlor epoxide	0.008	0.001	ND	0.026	35	34	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.054	30	40	108
Methoxychlor	10.0	0.1	ND	0.028	28	42	112
Surrogates	**% RECOVERY**						
2-Fluorophenol	84						
Phenol-d6	86						
Nitrobenzene-d5	93						
2-Fluorobiphenyl	95						
2,4,6-Tribromophenol	73						
Terphenyl-d14	109						

***NOTE: Elevated reporting limits due to sample matrix interference.**

Methods: EPA SW 846-1311, 8270, 8080.
CHEMIST: HC/CC/MB
ND - Not Detected

Director, Dr. Blair Leftwich

5-25-97
DATE

TRACE ANALYSIS, INC.
A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

May 29, 1997
Receiving Date: 05/21/97
Sample Type: Sludge
Project No: Sta. 501-1
Project Location: Hobbs, New Mexico

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL
Attention: Terry James
19 Barry Road
Midland, TX 79706

Extraction Date: 05/21/97
Analysis Date: 05/27/97
Sampling Date: 05/19/97
Sample Condition: I & C
Sample Received by: JH
Project Name: Facility

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit*	T73985 Sump	QC	Assmnt & Sampling RPD	%EA	%IA
Pyridine	5.0	0.5	ND	88	1	36	110
1,4-Dichlorobenzene	7.5	0.5	ND	80	12	45	100
o-Cresol	200.0	0.5	ND	74	15	55	93
m,p-Cresol	200.0	0.5	ND	74	15	51	93
Total Cresol	200.0	0.5	ND	---	---	---	---
Hexachloroethane	3.0	0.5	ND	74	11	49	93
Nitrobenzene	2.0	0.5	ND	77	10	60	96
Hexachlorobutadiene	0.5	0.05	ND	76	13	56	95
2,4,6-Trichlorophenol	2.0	0.5	ND	79	13	65	99
2,4,5-Trichlorophenol	400.0	0.5	ND	78	13	67	98
2,4-Dinitrotoluene	0.13	0.04	ND	79	9	68	99
2,4-D	10.0	0.5	ND	83	3	49	104
Hexachlorobenzene	0.13	0.05	ND	78	4	80	98
2,4,5-TP	1.0	0.5	ND	76	2	53	95
Pentachlorophenol	100.0	0.5	ND	74	5	79	93
Chlordane	0.03	0.001	ND	0.053	23	34	106
Toxaphene	0.5	0.05	ND	2.09	1	117	105
Lindane	0.4	0.001	ND	0.0265	40	30	106
Heptachlor	0.008	0.001	ND	0.027	35	34	108
Heptachlor epoxide	0.008	0.001	ND	0.026	35	34	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.054	30	40	108
Methoxychlor	10.0	0.1	ND	0.028	28	42	112
Surrogates	**% RECOVERY**						
2-Fluorophenol	82						
Phenol-d6	82						
Nitrobenzene-d5	92						
2-Fluorobiphenyl	94						
2,4,6-Tribromophenol	82						
Terphenyl-d14	108						

***NOTE: Elevated reporting limits due to sample matrix interference.**

Methods: EPA SW 846-1311, 8270, 8080.
CHEMIST: HC/CC/MB
ND - Not Detected

Director, Dr. Blair Leftwich

5-29-97
DATE

TRACE ANALYSIS, INC.
A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
Nickell Environmental
Attention: Terry James
4113 W. Industrial.
Midland TX 79703

Date: May 27, 1997
Date Rec: 5/21/97
Project: STA.501-1
Proj Name: Facility Assessment & Sampling
Proj Loc: Hobbs, NM

Lab Receiving # : 9705000362
Sampling Date: 5/19/97
Sample Condition: Intact and Cool
Sample Received By: JH

TCLP Vol in Sludge (mg/L)	EPA Limit	Reporting Limit	T73986 Tank	QC	RPD	%EA	%IA
Vinyl Chloride	0.2	0.05	ND	0.0	1	85	8
1,1-Dichloroethene	0.7	0.05	ND	0.0	1	110	9
Methyl Ethyl Ketone	200.0	0.05	ND	0.1	14	110	10
Chloroform	6.0	0.05	ND	0.0	4	99	9
1,2-Dichloroethane	0.5	0.05	ND	0.0	5	94	9
Benzene	0.5	0.05	ND	0.0	4	99	9
Carbon Tetrachloride	0.5	0.05	ND	0.0	4	103	9
Trichloroethene	0.5	0.05	ND	0.0	5	102	9
Tetrachloroethane	0.7	0.05	ND	0.0	7	105	9
Chlorobenzene	100.0	0.05	ND	0.0	7	103	9
1,4-Dichlorobenzene	7.5	0.05	ND	0.0	7	106	9

ND = Not Detected

	% RECOVERY
Dibromofluoromethane	93
Toluene-d8	97
4-Bromofluorobenzene	92

TEST	PREP METHOD	PREP DATE	ANALYSIS METHOD	ANALYSIS COMPLETED	CHEMIST	QC: (mg/L)	SPIKE: (mg/L)
TCLP Vol	EPA 1311	5/22/97	EPA 8260	5/23/97	RP	0.1 ea	100 ea

Director, Dr. Blair Leftwich

5-27-97
Date

TRACE ANALYSIS, INC.
A Laboratory for Advanced Environmental Research and Analysis

May-29-97 12:25P

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL
Attention: Terry James
19 Barry Road
Midland, TX 79706

May 29, 1997
Receiving Date: 05/21/97
Sample Type: Sludge
Project No: Sta. 501-1
Project Location: Hobbs, New Mexico

Extraction Date: 05/22/97
Analysis Date: 05/23/97
Sampling Date: 05/19/97
Sample Condition: I & C
Sample Received by: JH
Project Name: Facility Assmnt. & Sampling

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T73985 Sump	QC	RPD	%EA	%IA
Vinyl chloride	0.2	0.05	ND	0.083	1	85	83
1,1-Dichloroethene	0.7	0.05	ND	0.092	1	110	92
Methyl Ethyl Ketone	200.0	0.5	ND	0.102	13	110	102
Chloroform	6.0	0.05	ND	0.093	4	99	93
1,2-Dichloroethane	0.5	0.05	ND	0.096	5	94	96
Benzene	0.5	0.05	ND	0.097	5	99	97
Carbon Tetrachloride	0.5	0.05	ND	0.094	4	103	94
Trichloroethene	0.5	0.05	ND	0.094	6	102	94
Tetrachloroethene	0.7	0.05	ND	0.094	6	105	94
Chlorobenzene	100.0	0.05	ND	0.096	7	103	96
1,4-Dichlorobenzene	7.5	0.05	ND	0.095	7	106	95

SURROGATES	% Recovery
Dibromofluoromethane	93
Toluene-d8	97
4-Bromofluorobenzene	93

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich

5-29-97
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL
Attention: Terry James
19 Barry Road
Midland, TX 79706

May 29, 1997
Receiving Date: 05/21/97
Sample Type: Sludge
Project No: Sta. 501-1
Project Location: Hobbs, New Mexico

Extraction Date: 05/27/97
Analysis Date: 05/27/97
Sampling Date: 05/19/97
Sample Condition: Intact & Cool
Sample Received by: JH
Project Name: Facility Assmnt & Sampling

SAMPLE NO.	FIELD CODE	DRO* (mg/kg)
T73985	Sump	58,000
T73986	Tank	5,400
QC	Quality Control	236
Reporting Limit		50

*** DRO - Diesel Range Organics**

METHODS: EPA SW 5030, 8015B.
CHEMIST: DH

Director, Dr. Blair Leftwich

5-29-97
DATE

TraceAnalysis, Inc.

6701 Aberdeen Avenue Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: TERRY JAMES

Phone #: (915) 888-3334
FAX #: (915) 520-3814

Company Name & Address: NICKELL ENVIRONMENTAL CORP. 19 BARRY Rd. MIDLAND, TX 79706

Project #: STA.501-1

Project Name: FACILITY ASSMNT. & SAMPLING

Project Location: Hobbs, New Mexico

Sampler Signature: Chris E. Stagg

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE		SAMPLING: DATE	TIME
	SUMP	2					X			X			5/19	2:30
	TANK	2					X			X			5/19	2:30

ANALYSIS REQUEST	BTEX, MTBE	TPH 8015 DIESEL	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	8240 / 8260	8270
		X		X	X	X	X		
		X		X	X	X	X		

SPECIAL HANDLING	Turn around # of days	Fax ASAP	Hold

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Chris E. Stagg	5/20/97	2:10	Helen Shelton	5/20/97	2:10PM
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

REMARKS

Shipped Overnight

4 samples - MS

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1796
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL
Attention: Terry James
#19 Barry Road
Midland, TX 79706

May 1, 1997
Receiving Date: 04/29/97
Sample Type: Water
Project No: STA.501-1
Project Location: Hobbs, NM

Prep Date: 04/ /97
Analysis Date: 04/ /97
Sampling Date: 04/25/97
Sample Condition: Intact & Cool
Sample Received by: JH
Project Name: Facility Assmnt & Sampling

TA#	FIELD CODE	GRO (mg/L)
T72496	WW-1	11.3 *

METHODS: EPA 846-8015G.
CHEMIST: DH

* DRAFT RESULTS; QUALITY CONTROL INCOMPLETE.

Director, Dr. Blair Leftwich

5/1/97
DATE

TRACE ANALYSIS, INC.
A Laboratory for Advanced Environmental Research and Analysis

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL CORP.
Attention: Terry James
#19 Barry Road
Midland, TX 79706

May 1, 1997
Receiving Date: 04/29/97
Sample Type: Water
Project No: STA.501-1
Project Location: Hobbs, NM

Extraction Date: 04/29/97
Analysis Date: 05/01/97
Sampling Date: 04/25/97
Sample Condition: I & C
Sample Received by: JH
Project Name: Facility Assmnt & Sampling

TCLP METALS (mg/L)

TA#	Field Code	As	Se	Cd	Cr	Pb	Ag	Ba	Hg
	EPA LIMIT =	5.0	1.0	1.0	5.0	5.0	5.0	100.0	0.20
T72496	WW-1	<0.10	<0.10	<0.02	<0.05	<0.10	<0.05	<0.20	<0.01
QC	Quality Control	5.0	5.0	5.0	5.1	4.9	1.02	5.0	0.0048
	Reporting Limit	0.10	0.10	0.02	0.05	0.10	0.05	0.20	0.01
	RPD	1	2	3	2	5	25	3	1
	% Extraction Accuracy	95	98	98	77	93	90	101	100
	% Instrument Accuracy	99	101	100	101	97	102	100	96

CHEMIST: As, Se, Cd, Cr, Pb, Ag, Ba: RR Hg: RC
METHODS: EPA SW 846-1311, 6010, 7470.
TCLP METALS SPIKE: 2.0 mg/L As, Se, Cd, Cr, Pb, Ba; 0.15 mg/L Ag; 0.05 mg/L Hg.
TCLP METALS QC: 5.0 mg/L As, Se, Cd, Cr, Pb, Ba; 1.0 mg/L Ag; 0.005 mg/L Hg.

Director, Dr. Blair Leftwich

5/1/97
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL CORP.
Attention: Terry James
#19 Barry Road
Midland, TX 79706

May 1, 1997
Receiving Date: 04/29/97
Sample Type: Water
Project No: STA.501-1
Project Location: Hobbs, NM

Prep Date: 04/29/97
Analysis Date: 04/29/97
Sampling Date: 04/25/97
Sample Condition: Intact & Cool
Sample Received by: JH
Project Name: Facility Assessment & Sampling

TA#	Field Code	REACTIVITY	SULFIDES (ppm)	CYANIDES (ppm)	CORROSIVITY	pH (s.u.)	FLASHPOINT (^{o}F)
	EPA LIMIT =	---	500	250	---	<2 >12.5	>140 ^{o}F
T72496	WW-1	Non-reactive	<10	<2.5	Non-corrosive	7.7	>150
QC	Quality Control	---	---	---	---	7.0	---
RPD		0	0	0	0	0	0
% Extraction Accuracy		---	---	--	---	---	---
% Instrument Accuracy		---	---	--	---	100	---

METHODS: EPA SW 846-2.1.3, 2.1.2, 1010.
CHEMIST: JT

Director, Dr. Blair Leftwich

5/1/97
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

May 1, 1997

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL CORP.
Attention: Terry James
#17 Barry Road
Midland, TX 79706

Receiving Date: 04/29/97
Sample Type: Water
Project No: STA.501-1
Project Location: Hobbs, NM

Extraction Date: 04/30/97
Analysis Date: 04/30/97
Sampling Date: 04/25/97
Sample Condition: I & C
Sample Received by: JH
Project Name: Facility Assmt & Sampling

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit*	T72496 WW-1	QC	RPD	%EA	%IA
Pyridine	5.0	0.5	ND	89	19	13	111
1,4-Dichlorobenzene	7.5	0.5	ND	84	3	43	105
o-Cresol	200.0	0.5	ND	77	9	48	96
m,p-Cresol	200.0	0.5	ND	75	8	45	94
Total Cresol	200.0	0.5	ND	---	---	---	---
Hexachloroethane	3.0	0.5	ND	79	2	45	99
Nitrobenzene	2.0	0.5	ND	74	4	51	93
Hexachlorobutadiene	0.5	0.1	ND	80	5	49	100
2,4,6-Trichlorophenol	2.0	0.5	ND	78	3	48	98
2,4,5-Trichlorophenol	400.0	0.5	ND	81	4	56	101
2,4-Dinitrotoluene	0.13	0.1	ND	82	3	58	103
2,4-D	10.0	0.5	ND	85	8	46	106
Hexachlorobenzene	0.13	0.1	ND	85	3	86	106
2,4,5-TP	1.0	0.5	ND	86	6	45	108
Pentachlorophenol	100.0	0.5	ND	80	4	72	100
Chlordane	0.03	0.02	ND	0.0515	2	89	103
Toxaphene	0.5	0.5	ND	1.98	39	65	99
Lindane	0.4	0.02	ND	0.025	0	84	100
Heptachlor	0.008	0.002	ND	0.025	0	78	100
Heptachlor epoxide	0.008	0.002	ND	0.025	0	84	100
Total Heptachlor	0.008	0.02	ND	---	---	---	---
Endrin	0.02	0.02	ND	0.050	2	81	100
Methoxychlor	10.0	2.0	ND	0.25	0	92	100
Surrogates	**% RECOVERY**						
2-Fluorophenol	84						
Phenol-d6	88						
Nitrobenzene-d5	92						
2-Fluorobiphenyl	98						
2,4,6-Tribromophenol	108						
Terphenyl-d14	118						

*NOTE: Elevated reporting limits due to sample matrix interference.

Methods: EPA SW 846-1311, 8270, 8080.
CHEMIST: HC/CC/MB
ND - Not Detected

Director, Dr. Blair Leftwich

5/1/97
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NICKELL ENVIRONMENTAL CORP.
Attention: Terry James
#19 Barry Road
Midland, TX 79706

May 1, 1997
Receiving Date: 04/29/97
Sample Type: Water
Project No: STA.501-1
Project Location: Hobb, NM

Extraction Date: 04/30/97
Analysis Date: 04/30/97
Sampling Date: 04/25/97
Sample Condition: I & C
Sample Received by: JH
Project Name: Facility Assmnt & Sampling

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T72496 WW-1	QC	RPD	%EA	%IA
Vinyl chloride	0.2	0.05	ND	0.112	2	81	112
1,1-Dichloroethene	0.7	0.05	ND	0.099	1	101	99
Methyl Ethyl Ketone	200.0	0.05	1.71	0.114	1	94	114
Chloroform	6.0	0.05	ND	0.097	0	103	97
1,2-Dichloroethane	0.5	0.05	ND	0.097	1	94	97
Benzene	0.5	0.05	ND	0.100	2	101	100
Carbon Tetrachloride	0.5	0.05	ND	0.099	1	112	99
Trichloroethene	0.5	0.05	ND	0.101	2	106	101
Tetrachloroethene	0.7	0.05	ND	0.102	2	106	102
Chlorobenzene	100.0	0.05	ND	0.103	1	103	103
1,4-Dichlorobenzene	7.5	0.05	ND	0.105	0	98	105

SURROGATES	% Recovery
Dibromofluoromethane	93
Toluene-d8	93
4-Bromofluorobenzene	92

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich

5/1/97
DATE

TraceAnalysis, Inc.

6701 Aberdeen Avenue Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Terry Johns

Phone #: 915/520-4700

FAX #: 915/520-3844

Company Name & Address: Nichols Fam Corp. #15 Bear Kat Hobbs, TX 79240

Project #: STA. 501-1

Project Name: Facility Assessment + Sampling

Project Location: Hobbs, New Mexico

Sampler Signature: Terry Johns

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	Solid	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE		SAMPLING: DATE	TIME
	Low-1	6	9/40z	✓							✓			4/25	3:00
	Frac.-1	2	2					X			X			4/25	2:00

LAB # (LAB USE ONLY)	BTEX, MTBE	TPH 8015	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	8240 / 8260	8270
Low-1		X		X	X	X	X		
Frac.-1		X		X	X	X	X		

SPECIAL HANDLING

- Turn around # of days
- Fax ASAP
- Hold

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Terry Johns	4/28/97	5:00	Helen Shelton	4/28/97	5:00PM
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

REMARKS Turn around ASAP on Low-1
Normal Turnaround on Frac.-1

Shipped Greyhound

9 samples - MS

ATTACHMENT 2

B 10-F X

Date Printed 04/15/97

Waste Management, Inc.

GENERATOR'S WASTE PROFILE SHEET

Profile # HOB A01517

(_) Check here if this is a Recertification LOCATION OF ORIGINAL Industrial Waste Division

GENERAL INFORMATION

1. Generator Name: STAR TOOL CO Generator USEPA ID: EXEMPT
2. Generator Address: 1000 NW COUNTY RD Billing Address: (_) Same
   HOBBS NM 88240
3. Technical Contact/Phone: SIDNEY 505/397-4988
4. Alternate Contact/Phone: Billing Contact/Phone:

PROPERTIES AND COMPOSITION

5. Process Generating Waste: MAINTENANCE DEPT FLEET
6. Waste Name: USED OIL FILTERS (DRAINED)
7. A. Is this a USEPA hazardous waste (40 CFR Part 261)? Yes (_) No (X)
   B. Identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U): State Waste Codes:
8. Physical State @ 70F: A. Solid(X) Liquid(_) Both(_) Gas(_) B. Single Layer (_) Multilayer (X) C. Free liq. range 0 to 0%
9. A. pH: Range _____ or Not applicable (X) B. Strong Odor (_);describe
10. Liquid Flash Point: < 73F (_) 73-99F (_) 100-139F (_) 140-199F (_) >= 200F (_) N.A. (X) Closed Cup (X) Open Cup (_)
11. CHEMICAL COMPOSITION: List ALL constituents (incl. halogenated organics) present in any concentration and forward analysis

Constituents	Range		Unit Description
OIL FILTERS (DRAINED)		to 100	%
		to	
		to	
		to	
		to	
		to	
TOTAL COMPOSITION (MUST EQUAL OR EXCEED 100%):		100.000000	

12. OTHER: PCBs if yes, concentration _ _____ ppm, PCBs regulated by 40 CFR 761 (_). Pyrophoric (_) Explosive (_) Radioactive (_) Benzene if yes, concentration _ _____ ppm. NESHAP (_) Shock Sensitive (_) Oxidizer (_) Carcinogen (_) Infectious (_) Other
13. If waste subject to the land ban & meets treatment standards, check here: _ & supply analytical results where applicable.

SHIPPING INFORMATION

14. PACKAGING: Bulk Solid (X) Bulk Liquid (_) Drum (_) Type/Size: OTHER Other 3 CU. YD. CONTAINER
15. ANTICIPATED ANNUAL VOLUME: 40 Units: CUBIC YARDS Shipping Frequency: MONTH

SAMPLING INFORMATION

Sample Tracking Number: 4896864

16a. Sample source (drum, lagoon, pond, tank, vat, etc.):
Date Sampled: _____ Sampler's Name/Company:
16b. Generator's Agent Supervising Sampling: 17. (_) No sample required (See instructions.)

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize WMI to obtain a sample from any waste shipment for purposes of recertification.

Signature | SIDNEY MCCORMICK VP (Name and Title) | 4/14/97 (Date)

Date 4/15/97
Time 17:28:04

WASTE MANAGEMENT DECISION

Location of Original WESTERN REGION LAB

I. Generator and Facility Information

Decision Site Hobbs Landfill
Proposed Management Facility Hobbs Landfill

*** This Decision is APPROVED

Tracking #: 4896864 Priority : HB
Profile # : A01517 Date Received: 04/15/97
Effective Date: 04/15/97
Generator : STAR TOOL CO
Waste Category Code:
Description : USED OIL FILTERS (DRAINED)

II. Decision to Deny Approval for Management of Waste

Reason for Denying Approval

Final Approval _____ Name (print) _____ Date _____

III. Decision to Approve
Approved

a) Approved Management Methods
Direct landfill

b) Precaution Conditions or Limitations on Approval

(1) Site Conditions

(2) Contracting Conditions

(3) Site and Contracting Conditions
USED OIL FILTERS MUST BE NON-TERNE PLATED OIL FILTERS THAT ARE NOT MIXED WITH WASTE LISTED IN 40 CFR 261 SUBPART D AND HAVE BEEN GRAVITY HOT-DRAINED USING ONE OF THE METHODS LISTED IN 40 CFR 261.4 (b) (13) (i); (ii); (iii); (iv).
NO RCRA HAZARDOUS WASTE MAY BE SHIPPED ON THIS PROFILE.
NO FREE LIQUIDS.
THE PROFILE SHEET NUMBER MUST BE PRINTED ON THE SHIPPING PAPERS.
HOBBS LANDFILL RESERVES THE RIGHT TO REJECT ANY SHIPMENT OF WASTE THAT FAILS TO CONFORM WITH PROFILE SHEET INFORMATION/DOCUMENTATION.
CONTACT HOBBS LANDFILL TO SCHEDULE WASTE OF DISPOSAL AT LEAST 24 HOURS PRIOR TO SHIPPING.
(505) 392-6571

c) Analytical Requirements for Each Load
VISUAL INSPECTION; CHECK FOR FREE LIQUIDS.

d) Decision Expiration Date 04/15/99

IV. Final Decision

State any Additional Precautions, Conditions, or Limitations

Date 4/15/97
Time 17:28:04

WASTE MANAGEMENT DECISION

Location of Original WESTERN REGION LAB

I. Generator and Facility Information

Decision Site Hobbs Landfill
Proposed Management Facility Hobbs Landfill

*** This Decision is APPROVED

Tracking #: 4896864 Priority : HB
Profile # : A01517 Date Received: 04/15/97
Effective Date: 04/15/97
Generator : STAR TOOL CO
Waste Category Code:
Description : USED OIL FILTERS (DRAINED)

IV. Continuation.....

Final Approval _____ Name (print) RAYMOND RUTKOWSKI Date 04/15/97