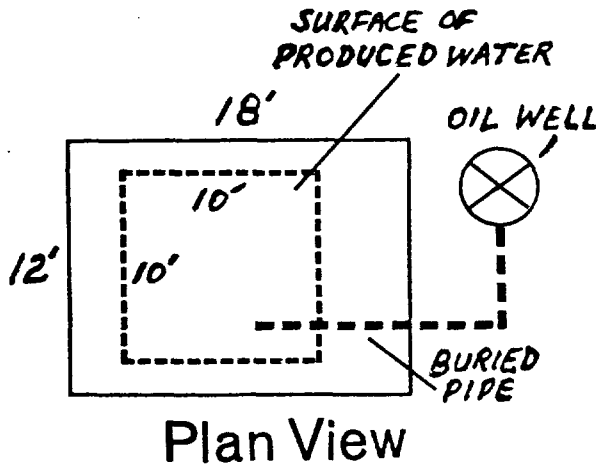
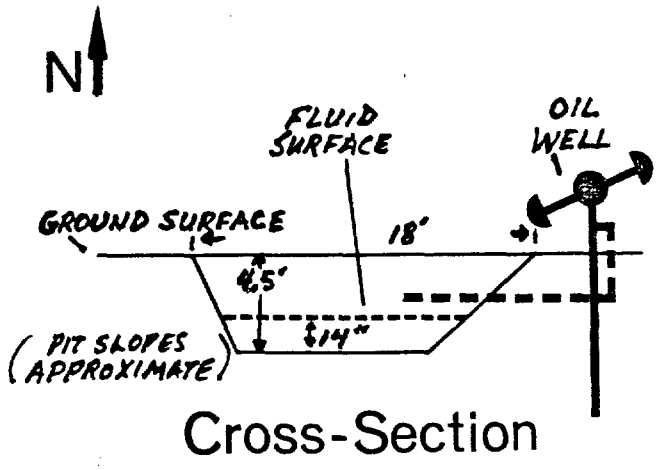
EXHIBIT ZAMAN-3

DIMENSIONS OF PRODUCED WATER DISPOSAL PIT
Duncan Oil Field
T29N, R16W, Sec. 6, 50' FSL, 50' FWL, San Juan County, N.M.



Plan View



Cross-Section

— prepared by M. Zaman, 3/29/85

EXHIBIT 4

March 27, 1985

M_E_M_O_R_A_N_D_U_M

TO : Akhtar Zaman, Director
Minerals Department

FROM : Masud-Uz-Zaman, Director
Water Management Department

SUBJECT: Duncan Oil Field Well No. 6-11

We are in the process of conducting Duncan Oil Field's groundwater impact study for the Hogback area. Well No. 6-11 has been identified in the field. We would appreciate it if you could provide us a complete well record including electric logs for this well.

Masud-Uz-Zaman

Form 9-331 C
(May 1963)

P. O. Box 959
WINDOW ROCK, ARIZONA 86515

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42 R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Walter Duncan

3. ADDRESS OF OPERATOR: Box 234, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 50' FSL - 50' FWL
At proposed prod. zone:

5. LEASE DESIGNATION AND SERIAL NO.: 14-20-0603-~~16810~~/0008

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Navajo

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: North Hogback 6

9. WELL NO.: 11

10. FIELD AND POOL, OR WILDCAT: Slickrock Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 6, T29N, R16W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 8 miles east-southeast of Shiprock, NM

12. COUNTY OR PARISH: San Juan

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 50'

16. NO. OF ACRES IN LEASE: 640

17. NO. OF ACRES ASSIGNED TO THIS WELL: 2-1/2

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 560'

19. PROPOSED DEPTH: 690'

20. ROTARY OR CABLE TOOLS: Cable 0-20' Rotary 20-690'

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4984' GR

22. APPROX. DATE WORK WILL START*: 9-20-75

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
	7"	20#	20'	5 sx
6-1/4"	4-1/2"	9.5#	675'	75 sx

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SEP 12 1975
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

1. Drive 7" csg thru boulders to approx 20'
2. Drill 6-1/4" hole to top of Dakota formation approx 675'
3. Set 4-1/2" csg cemented w/75 sx
4. Drill 3-7/8" hole to approx 690' w/air to test Dakota formation
5. If commercial oil production is indicated 2-3/8" tbg will be run and the well completed naturally in the open hole.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Jim L. Jacobs TITLE Agent DATE 9-8-75

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

RELEASED TO OPERATOR
SEP 24 1975
U. S. GEOLOGICAL SURVEY

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
Walter Duncan	North Hogback	6-11

Unit Letter	Section	Township	Range	County
M	6	29 North	16 West	San Juan

Actual Footage Location of Well:
50 feet from the South line and 50 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4984	Dakota	Slickrock Dakota	Proration Unit: 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

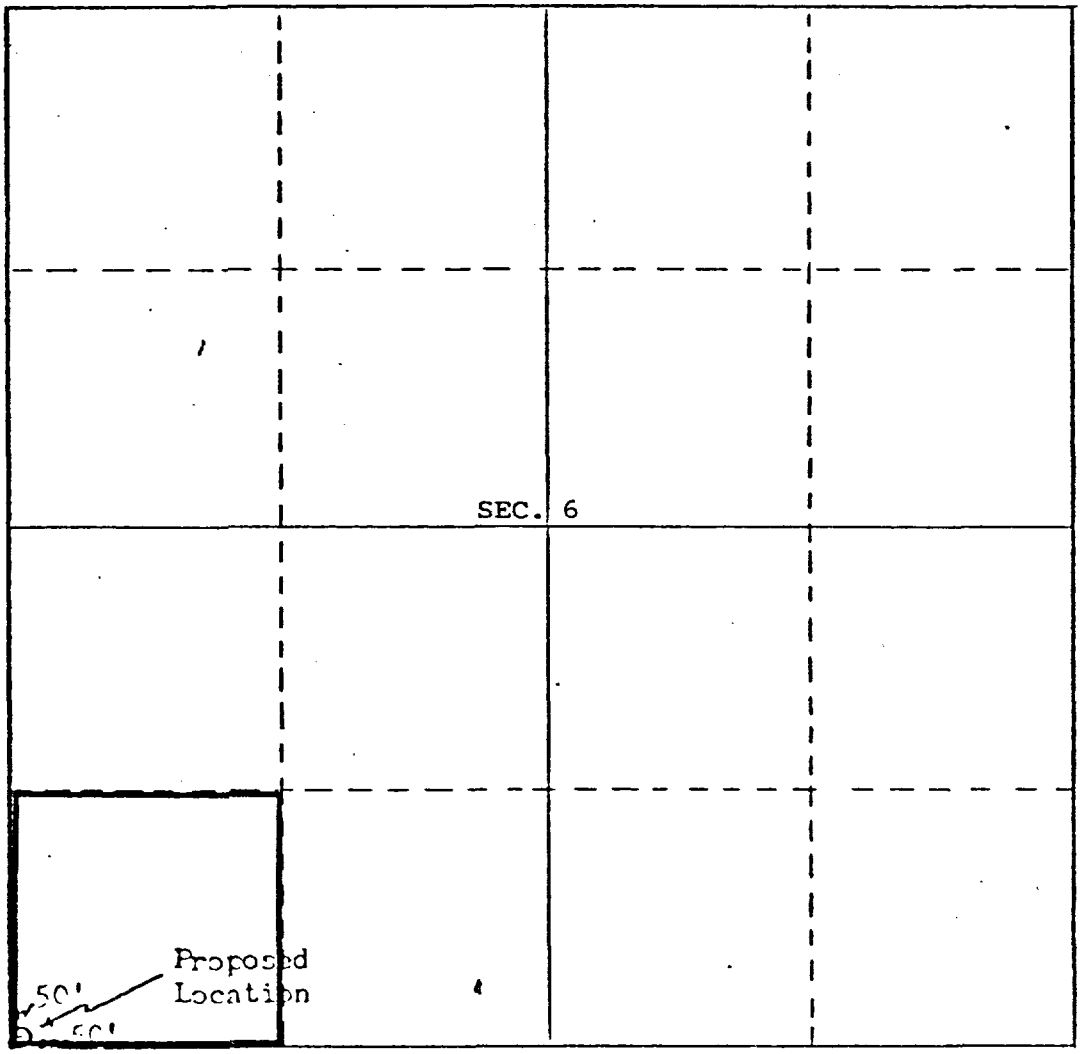
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Jim L. Jacobs

Position: Agent

Company: Walter Duncan

Date: 9-8-75

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Sept. 2, 1975

Date Surveyed

Frederick H. Reed

Registered Professional Engineer and/or Land Surveyor

Frederick H. Reed

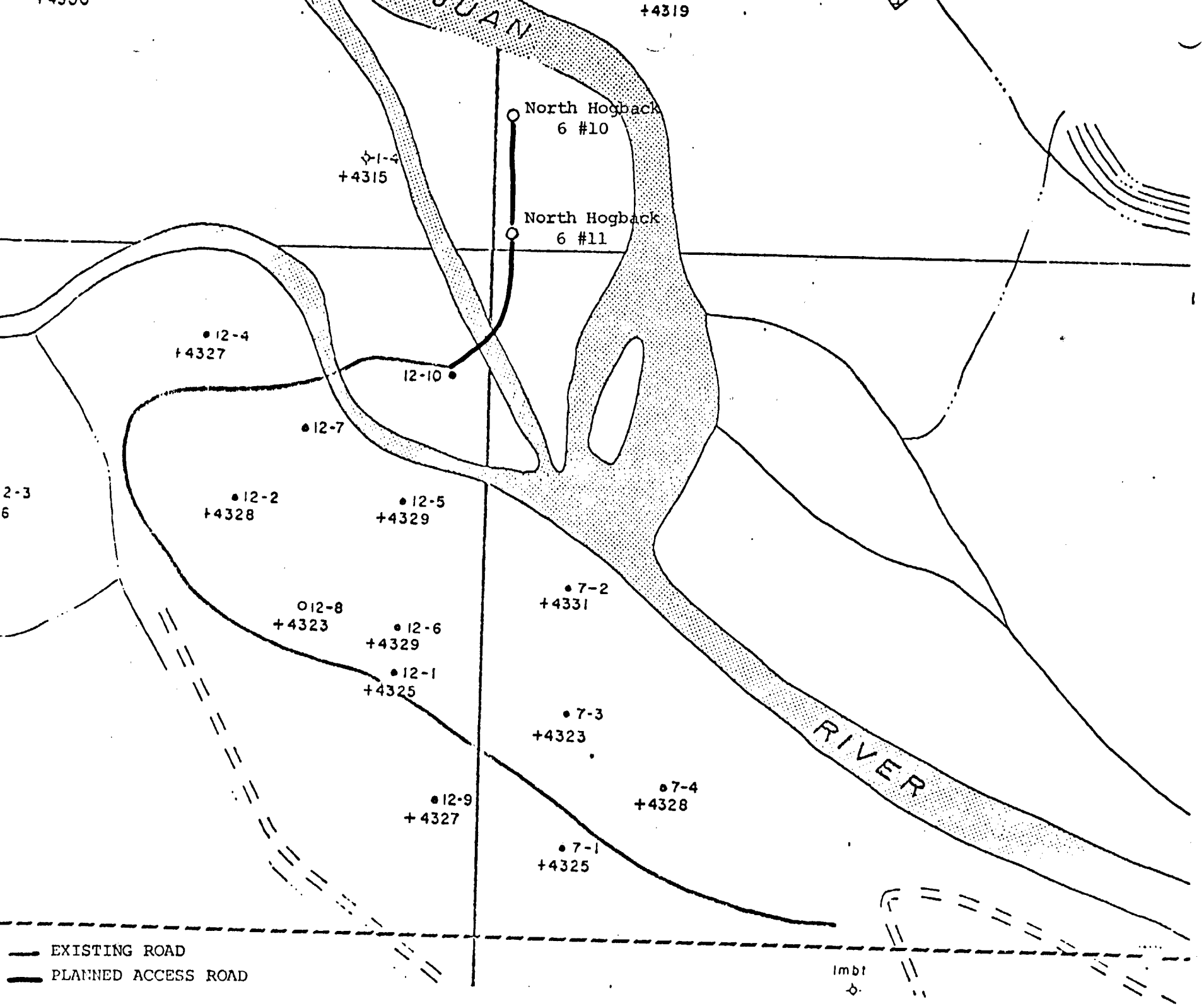
Certificate No. 3825

DEVELOPMENT PLAN

Walter Duncan

North Hogback 6 #11

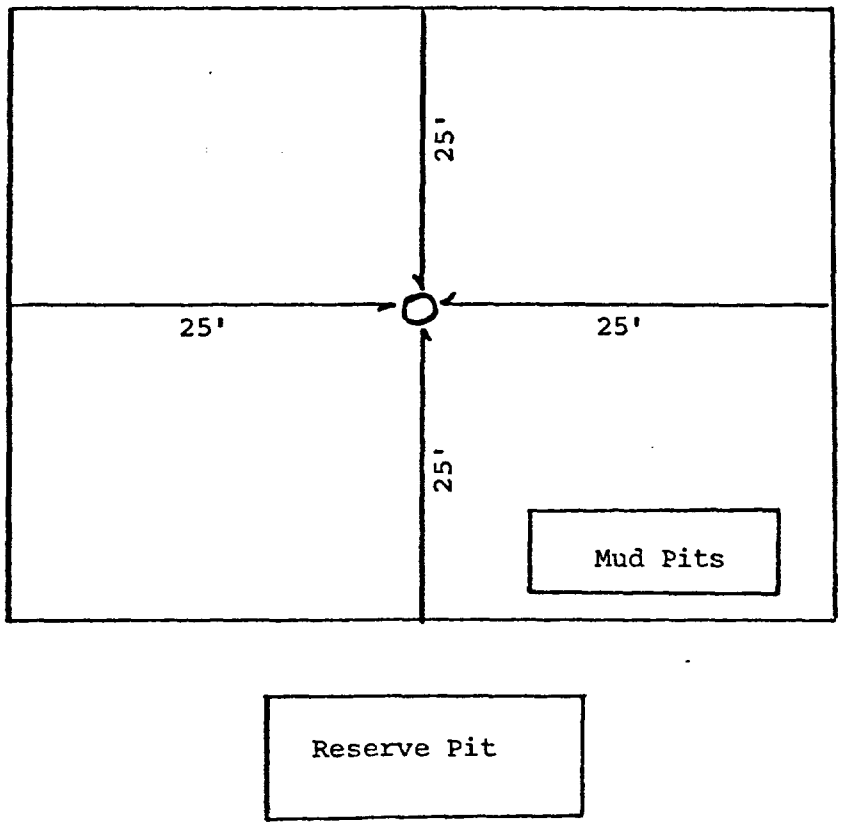
1. Existing roads shown on attached plat.
2. Planned access from existing road approximately 600 ' to new location.
3. Location of well: 50' FSL - 50' FWL
   Sec 6, T29N, R16W
   San Juan County, NM
4. No additional well(s) planned on this lease at this time.
5. Existing oil tank will be used.
6. Water will be secured from San Juan River.
7. Waste materials will be buried on location or in reserve pit.
8. No permanent camp is planned; trailer house will be used on location while drilling.
9. Do not plan to build airstrip.
10. See attached plat for layout.
11. Pits will be filled, location cleaned up, and area not in use for producing well will be reseeded using broadcast method of planting.


+4319
North Hogback
6 #10
1-4
+4315
North Hogback
6 #11
12-4
+4327
12-10
12-7
2-3
6
12-2
+4328
12-5
+4329
7-2
+4331
12-8
+4323
12-6
+4329
12-1
+4325
7-3
+4323
RIVER
7-4
+4328
12-9
+4327
7-1
+4325
EXISTING ROAD
PLANNED ACCESS ROAD
Imbt

WALTER DUNCAN

North Hogback 6 #11

Proposed Location Layout



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FEB 27 1976
U. S. GEOLOGICAL SURVEY
BOSWELL, NEW MEXICO

FILING NO.

6-29N-16W

COMPANY WALTER DUNCAN

WELL North Hogback 6 No. 11

FIELD Slickrock Dakota

COUNTY San Juan STATE New Mexico

LOCATION: 50'FSL & 50'FWL

SEC 6 TWP 29N RGE 16W

Other Services

None

Permanent Datum Ground Level Elev. 4984

Log Measured from GL, 0 Ft. Above Permanent Datum

Drilling Measured from GL

Elevations:
KB -----
DF -----
GL 4984

Date	1-29-76			
Run No.	One			
Depth—Driller	680			
Depth—Logger	658			
Bottom Logged Interval	657			
Top Logged Interval	30			
Casing—Driller	7 @ 27	@	@	@
Casing—Logger	30			
Bit Size	6 1/4			
Type Fluid in Hole	Water			
	@	@	@	@
Density and Viscosity	--- | ---			
pH and Fluid Loss	--- | --- cc	cc	cc	cc
Source of Sample	Flowline			
Rm @ Meas. Temp.	10.0@ 79 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	9.8@ 79 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	9.5@ 79 °F	@ °F	@ °F	@ °F
Source of Rmf and Rmc	M | C			
Rm @ BHT	--- @ --- °F	@ °F	@ °F	@ °F
Time Since Circ.	1 Hour			
Max. Rec. Temp. Deg. F.	---------- °F	°F	°F	°F
Equip. No. and Location	7008 Farmington			
Recorded By	Denton-Hamilton			
Witnessed By	Jacobs			

RECEIVED
FEB 26 1976
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

FOLD HERE

Scale Changes

Changes in Mud Type or Additional Samples

Date | Sample No. | Type Log | Depth | Scale Up Hole | Scale Do

Depth-Driller

Type Fluid in Hole

Dens. | Visc.

pH | Fluid Loss cc

Source of Sample

Rm @ Meas. Temp. @ °F

Rmf @ Meas. Temp. @ °F

Rmc @ Meas. Temp. @ °F

Source Rmf Rmc

Rm @ BHT @ °F

Rmf @ BHT @ °F

Rmc @ BHT @ °F

Equipment Data

Run No.	Tool Type	Tool Position	S. O.	Tool No.	Elec. No.	Panel No.
One	EL-2"	Free	None	1		68

Remarks:

RESISTIVITY

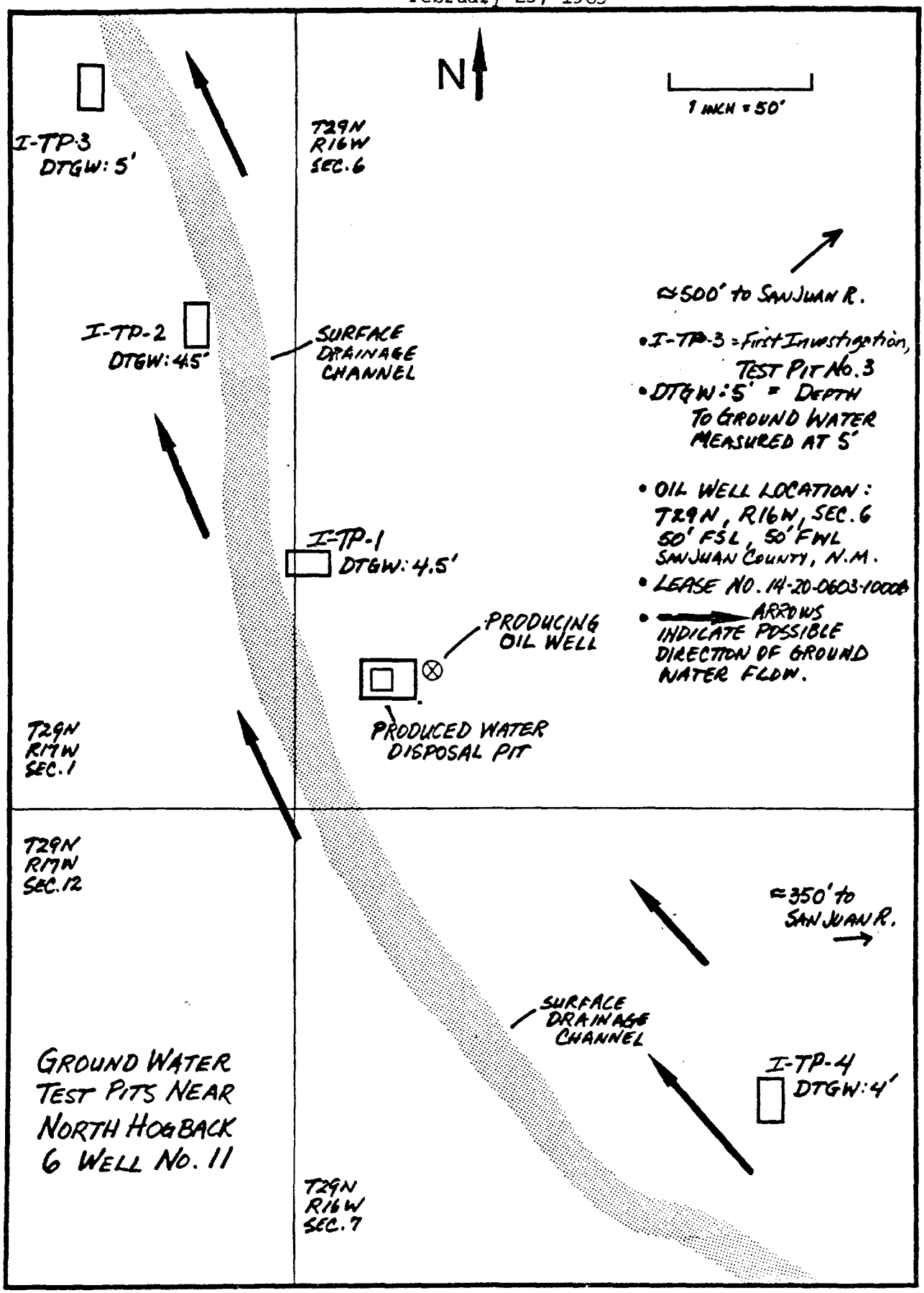
RESISTIVITY

DEPTHS

SPONTANEOUS POTENTIAL

EXHIBIT

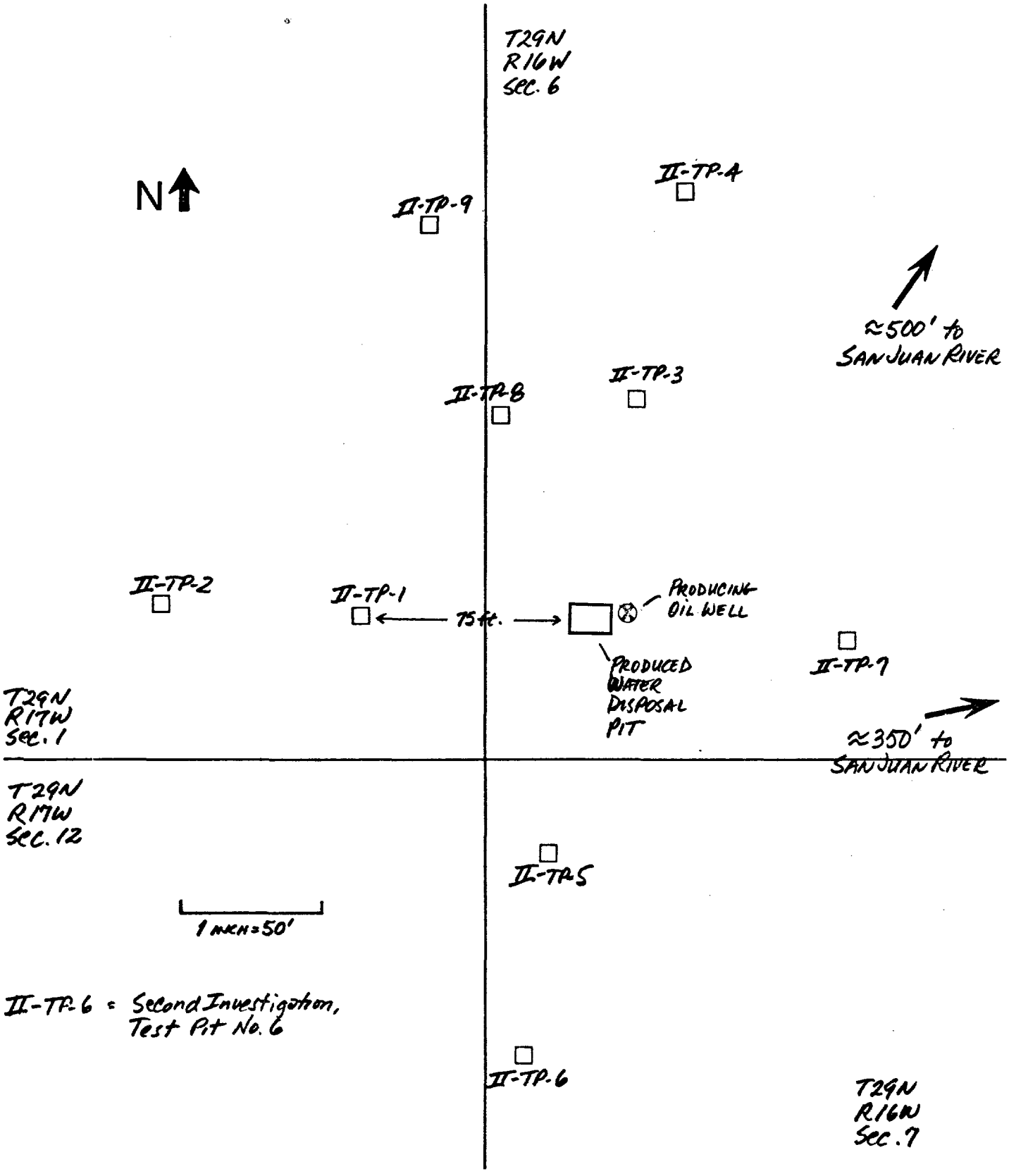
SITE LOCATION MAP
DUNCAN OIL FIELD HYDROLOGIC INVESTIGATION
February 25, 1985



mz3/8/85

EXHIBIT [illegible]

SITE LOCATION MAP
DUNCAN OIL FIELD HYDROLOGIC INVESTIGATION
March 18, 1985



II-TP-6 = Second Investigation, Test Pit No. 6

mz3/8/85

EXHIBIT 2 A-2-7

LITHOLOGIC FEATURES OF TEST PITS
DUNCAN OIL FIELD STUDY AREA
February 25, 1985
(dimensions are in length, width and depth, respectively)

Test Pit No.	Description of Observed Soil Conditions and Ground Water
1	Medium-to-coarse-grained sands with gravel and cobbles present; dark black oily stained soil at 3.5 feet below surface; water entered pit at 4.5 feet below surface; after 30 minutes, pit bottom had filled with 6 inches of water; water was bluish- and greenish-black with obvious oily film on top and strong hydrocarbon smell.
2	1 foot of topsoil; 3 feet of gravelly medium-to-coarse-grained sand with trace of silt; soils saturated with black oily substance at 4 feet below surface; water entered pit at 4.5 feet below surface; after 20 minutes, water was brownish black and cloudy with noticeable oily sheen and strong hydrocarbon odor.
3	Sand and gravel observed to bottom of pit; dark gray to black staining of pit walls at 4 feet below surface; water entered pit at 5 feet below ground surface, initially from east side and within minutes also from south side; after 40 minutes, water was light brown and cloudy with obvious sandy sediment; thin oily sheen observed on top of water; discernable, but weak hydrocarbon odor noted.
4	2.5 feet of topsoil, silty fine sand to sandy silt (soils observed to be much more siltier than those of Test Pits 1, 2 or 3); roots and fibers plentiful in soil; gravelly medium-to-coarse-grained sands with gravel, cobbles and boulders from 2.5 to 5 feet below ground surface; moisture observed on pit walls at 3 feet below ground surface; water entered pit at 4 feet below ground surface and filled bottom of pit to 9 inches; very slight oily film observed on top of water, but no hydrocarbon or other foreign odors noted.

mz3/8/85

EXHIBIT ____

Lithologic Logs of Test Pits
Duncan Oil Field
Hydrologic Investigation, March 18, 1985
(based on field notes of Masud Zaman)

Test PIT #1

0 - 1'	Top Soil, Brown silty fine to coarse sand, gravel, boulders, roots, fibers, etc.
1 - 3.65'	Gray-brown tan gravelly medium coarse SAND, occasional boulder and cobble, trace of silt
3.65' - 6.0'	Dark-gray to black oily gravelly medium coarse SAND, occasional boulder, cobble

Static Water Level
11:15 AM - thin oily layer on water surface: 5.0'

1:42 PM - Collected Purgeable water sample PIT #1: 4.1'

Gary Eiceman collected water and soil samples

Test PIT #2

0.1'	Sandy gravel, boulders, cobbles and root fibers, etc.
1 - 3.3'	Gray brown fine to coarse SAND, trace of silt
3 - 6.0'	Gray brown medium coarse SAND with fine to medium gravel, black staining at 4.8'

Static Water Level
11:35 AM - 5.0'

1:40 PM - 4.4'

Gray Eiceman collected water and soil samples

Test PIT #3

0 - 1.5'	Top soil, silty sand, gravel, boulder, cobble, root fibers, etc.
1.5' - 4.1'	Gray brown fine to coarse SAND, some fine to medium gravel, occasional boulder
4.1' - 6.5'	Gray oily fine to coarse SAND, gravel, boulders, etc.

Water seeping into the pit from all directions at about 5.0' below the surface.

Static Water Level
12:21 PM - 5.1'

1:45 PM - 4.2'

Gary Eiceman collected water and soil samples
Masud Zaman collected two perge samples and one soil sample

Test PIT #4

0 - 0.5'	Top soil, brown silty SAND, gravel, boulder, cobbles, roots, etc.
0.5' - 5'	Gray-brown gravelly medium coarse SAND, occasional boulder, roots

Static Water Level
12:33 PM - 3.8'

1:46 PM - 3.3'

Gary Eiceman collected water and soil samples

Test PIT #5

0 - 1.5'	Top soil, brown silty sand, gravel, boulder, cobble, roots and fibers
1.5' - 6.0'	Gray-brown fine to coarse SAND, some gravel, occasional boulder

Static Water Level
12:40 PM - 5.0'

1:43 PM - 4.1'

Gary Eiceman collected water and soil samples

Test PIT #6

0 - 0.5'	Top soil, gray brown silty fine SAND, occasional boulders
0.5' - 3.0'	Gravely tan fine to coarse SAND, some boulders and cobbles
3.0' - 6.0'	Gray-brown medium coarse SAND, trace of silt, some gravel

Static Water Level
12:45 PM - 5.8'

1:43 PM - 4.0'

Gary Eiceman collected water and soil samples

Test PIT #7

0 - 1'	Top soil, brown sandy SILT with some gravel and boulders, some root/fibers
1 - 5.0'	Gray-tan brown gravelly medium coarse SAND, some boulder and cobble

Static Water Level
12:56 PM - 3.10'

1:44 PM - 3.3'

Gary Eiceman collected water and soil samples

*PRODUCED WATER PIT
PERGE SAMPLES FROM PIT BY MASUD ZAMAN
Gary Eiceman also collected water samples

Test PIT #8

0 - 1'	Top soil, brown tan sandy-silty CLAY roots (lot)
1 - 3.5'	Gravelly brown medium coarse SAND, some boulder and cobbles
3.5' - 6.0'	Dark oily medium coarse sand, some gravel, boulder

Static Water Level
1:20 PM - 4.8'

1:46 PM - 4.2'

Gary Eiceman collected water and soil samples

Test PIT #9

0 - 1.8'	Gravelly brown silty fine to coarse SAND, boulder and cobbles, root fibers
4.10'	Gray-brown medium coarse SAND, some fine to medium gravel
4.10' - 6.0'	Black oily medium coarse SAND, some fine to medium gravel

Static Water Level
1:36 PM - 5.3'

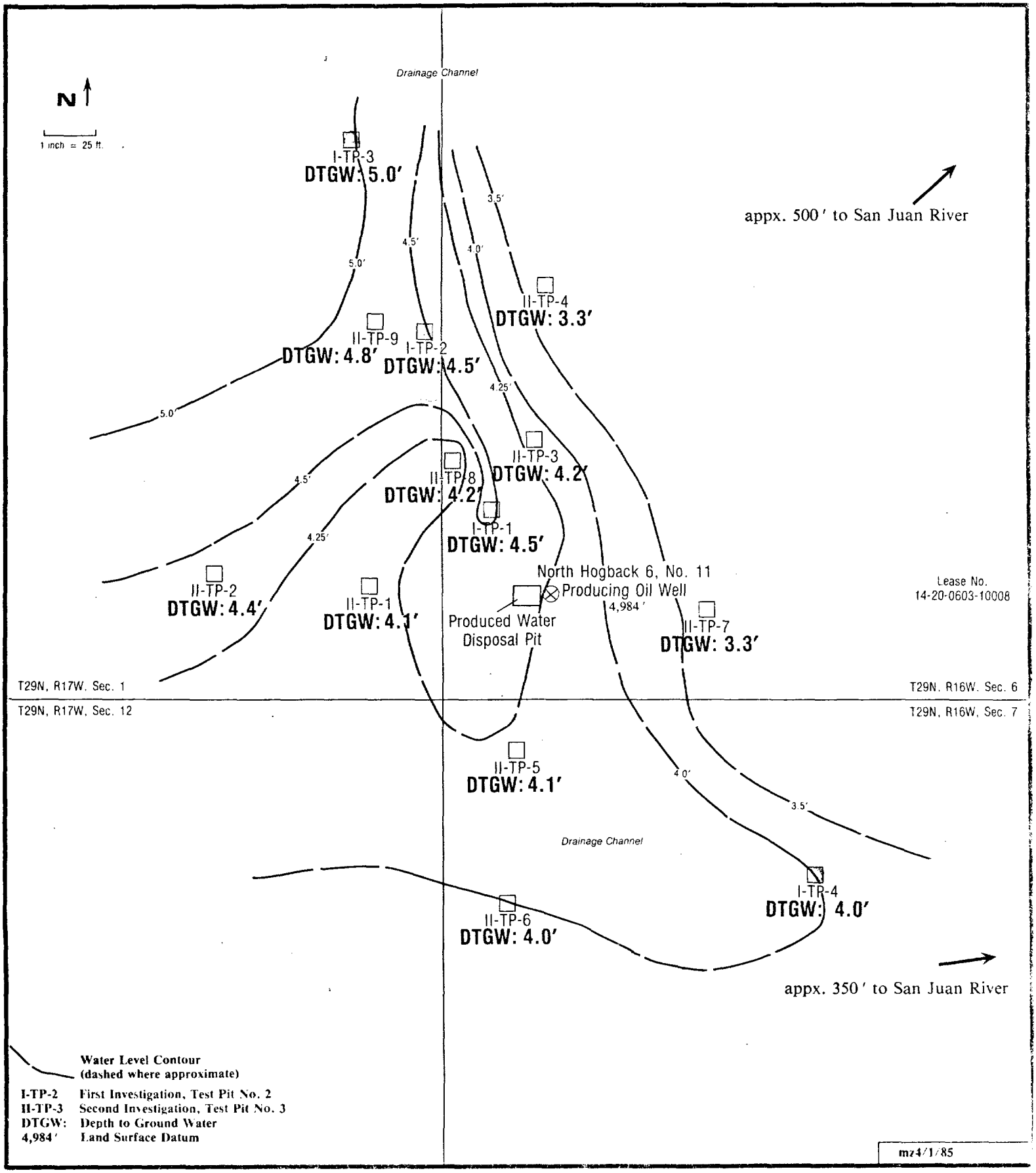
1:48 PM - 4.8'

Gary Eiceman collected water and soil samples

ALL TEST PITS WERE DUG BY PORTABLE BACK-HOE
FURNISHED BY NAVAJO DEPARTMENT OF OPERATIONS & MAINTENANCE

EXHIBIT

WATER LEVEL MAP
DUNCAN OIL FIELD
HYDROLOGIC INVESTIGATION
February 25 and March 18, 1985
San Juan County, N.M.



mz4/1/85

EXHIBIT ____

HYDROLOGIC GRADIENT CALCULATIONS
Duncan Oil Field Investigations
(prepared by M. Zaman)

Calculation No. 1

$$\frac{\text{Change in Water Table Level}}{\text{Horizontal Length of Study Area}} \quad \frac{(dh)}{(dl)} = \text{gradient constant}$$

gradient constant x 5,280 feet/mile = hydrologic gradient (ft./mile)

$$\frac{1.5 \text{ feet}}{400 \text{ feet}} \times 5{,}280 \text{ feet/mile} = 19.80 \text{ feet/mile}$$

Calculation No. 2

$$\frac{5{,}280 \text{ feet/mile}}{\text{Horizontal Length of Study Area}} = \text{n miles}$$

n miles x dh (Change in Water Table Level) = Hydrologic Gradient

$$\frac{5{,}280 \text{ feet/mile}}{400 \text{ feet}} = 13.2 \text{ miles}$$

13.2 miles x 1.5 feet = 19.8 ft./mile

mz3/28/85

EXHIBIT ____

GROUND WATER SAMPLING DATA
DUNCAN OIL FIELD STUDY AREA
February 25, 1985

Sample No.	Pit and Sample Identification	Fluid Sampled	Parameters Sampled	Time
1	Separator fluid from pipe emptying into disposal pit	produced water	purgeable aromatics,	1130
2	Fluid standing in unlined pit next to producing oil well	produced water	purgeable aromatics, general chemistry, metals, nitrates	1215
3	Test Pit No. 1	ground water	purgeable aromatics, general chemistry, metals, nitrates	1340
4	Test Pit No. 2	ground water	purgeable aromatics, general chemistry, metals, nitrates	1355
5	Test Pit No. 3	ground water	purgeable aromatics	1440
6	Test Pit No. 4	ground water	purgeable aromatics, general chemistry, metals, nitrates	1430

In the table above, "general chemistry" refers to dissolved solids and major ions, and "purgeable aromatics" to the benzene family of hydrocarbons, namely benzene, toluene, ethylbenzene and xylene.

mz3/8/85

EXHIBIT

ANALYTIC RESULTS FOR WATER SAMPLING IN THE DUNCAN OIL FIELD
Field Investigation Conducted by M. Zaman et al., February-March 1985
Township 29 North, Range 16 West, Section 6, 50 Feet FSL, 50 Feet FWL
(all concentrations in milligrams per liter or parts per million)

February 25

	Sample 1 End of Pipe	Sample 2 Prod'd H2O	Sample 3 I-TP-1	Sample 4 I-TP-2	Sample 5 I-TP-4	Sample 6 I-TP-3
Organics:						
Ethylbenzene	.044	.04	ND	.005	ND	ND
Benzene	.0088	.104	.220	detected	.021	.100
Metaxylene	.4	.341	.009	.170	.004	ND
Orthoxylene	.084	.073	ND	ND	ND	ND
Paraxylene	.08	.071	.003	.008	ND	ND
Phenols (total)	3.8	.37	.50	.57	.55	NR
Toluene	.135	.137	ND	ND	ND	ND
Unidentified	.02	.022	.03	.322	ND	ND
Lab Detection Limit	.025	.050	.010	.001	.002	.001
Compounds detected, but not quantified	aliphatics, 3-carbon substituted benzenes	aliphatics, 3-carbon substituted benzenes, 1- and 2-methyl-naphthylene	3-carbon substituted benzenes	22 peaks	7 peaks	1 peak
General Chemistry:						
Alkalinity	1,501.	1,221.	1,201.	734.5	152.	NR
Calcium	12.	10.	16.	88.1	176.3	NR
Chloride	204.4	122.5	199.5	63.	12.1	NR
Hardness(Tot.)	20.	20.	56.	108.	216.	NR
Magnesium	1.9	2.4	9.7	4.8	9.7	NR
Nitrate(N-NO3)	1.92	1.95	10.9	120.0	2.5	NR
pH(@ 20 C. lab)	8.25	8.7	7.7	7.6	7.9	NR
Potassium	2.7	1.5	1.5	2.3	.7	NR
Sodium	805.	791.2	696.9	319.7	36.8	NR
Sulfate	570.	223.	367.	67.	15.8	NR
TDS	1,655.5	1,701.5	1,379.6	603.8	234.3	NR
Metals:						
Arsenic	.142	.232	.241	.145	ND	NR
Barium	1.08	1.264	.539	.853	.055	NR
Cadmium	.004	.003	<.001	.003	.001	NR
Chromium	.03	.023	.036	.016	.009	NR
Lead	.045	.045	.044	.148	.019	NR
Mercury	<.002	<.002	<.002	<.002	<.002	NR
Selenium	.077	.1745	.081	.097	.013	NR
Silver	.007	.0099	.005	<.001	<.001	NR

(continued)

(continued)

ANALYTIC RESULTS FOR WATER SAMPLING IN THE DUNCAN OIL FIELD
Field Investigation Conducted by M. Zaman et al., February-March 1985

March 18*

	Sample 1 Produced Water	Sample 2 II-TP-1	Sample 3 II-TP-3
Organics:			
Ethylbenzene	.106	ND	ND
Benzene	detected, <50 ppb	ND	ND
Metaxylene	.39	ND	.059
Orthoxylene	.15	ND	ND
Paraxylene	.08	ND	ND
Toluene	.18	ND	ND
Phenols (total)	NR	NR	NR
Lab Detection Limit	.050	.050	.005
Compounds detected, but not quantitied	6- to 8-carbon aliphatics @ 10 ppb	10- to 20-carbon aliphatics @ 100-500 ppb	

(Samples taken March 18, 1985 were not analyzed for general chemistry, metals or nitrates.)

ND	Not detected
NR	Sample not analyzed
I-TP-2	Feb. 25 investigation, Test Pit No. 2
II-TP-3	March 18 investigation, Test Pit No. 3
ppb	parts per billion

mz4/1/85

REPORT TO: Dept of Water Management
PO Box 309
Windowrock, Az 86515

LABORATORY

LAB NUMBER DRG-165-H 2/27/85

85-0165-B

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water ☒ Soil ☐ Other

Water Supply and/or Code No. PIT #1

City & County DUGGAN OIL FIELD, SAN JUAN COUNTY, N.M.

Collected (date & time) (850225/1100) By (name) M. ZAMORA, D. Payne

pH=_____; Conductivity=_____umho/cm at_____°C; Chlorine Residual=_____

Dissolved Oxygen=_____mg/l; Alkalinity=_____; Flow Rate=_____

Sampling Location, Methods & Remarks (i.e. odors etc.)

preserved in cyclohexane

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed_____

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed_____

Method of Shipment to Laboratory_____.

THIS FORM ACCOMPANIES____ septum vials with teflon-lined discs identified as:
specimen_____; duplicate_____; triplicate_____; blank(s)_____,
and_____ amber glass jug(s) with teflon-lined cap(s) identified as_____,
and_____ other container(s) (describe)_____ identified as_____.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from_____ to
_____ at (location)_____ on
(date & time)_____ and that the statements in this block are correct.
Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .
Signature(s)_____ _____

I (we) certify that this sample was transferred from_____ to
_____ at (location)_____ on
(date & time)_____ and that the statements in this block are correct.
Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .
Signature(s)_____ _____

ANALYSES REQUESTED

LAB. No.: ORG- 165

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN
	X	AROMATIC HYDROCARBON SCREEN
		HALOGENATED HYDROCARBON SCREEN
		GAS CHROMATOGRAPH/MASS SPECTROMETER
		SPECIFIC COMPOUNDS

QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBONS
		CHLORINATED HYDROCARBON PESTICIDES
		CHLOROPHENOXY ACID HERBICIDES
		HYDROCARBON FUEL SCREEN
		ORGANOPHOSPHATE PESTICIDES
		POLYCHLORINATED BIPHENYLS (PCB's)
		POLYNUCLEAR AROMATIC HYDROCARBONS
		TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
GC/MS purgeables			
Benzene	88		
Toluene	135		
Ethylbenzene	44		
p-Xylene	80		
m-Xylene	400		
o-Xylene	84		
		* DETECTION LIMIT	25ppb

REMARKS: Aliphatic Compounds & 3 Carbon substituted benzenes were also detected but not quantitated.

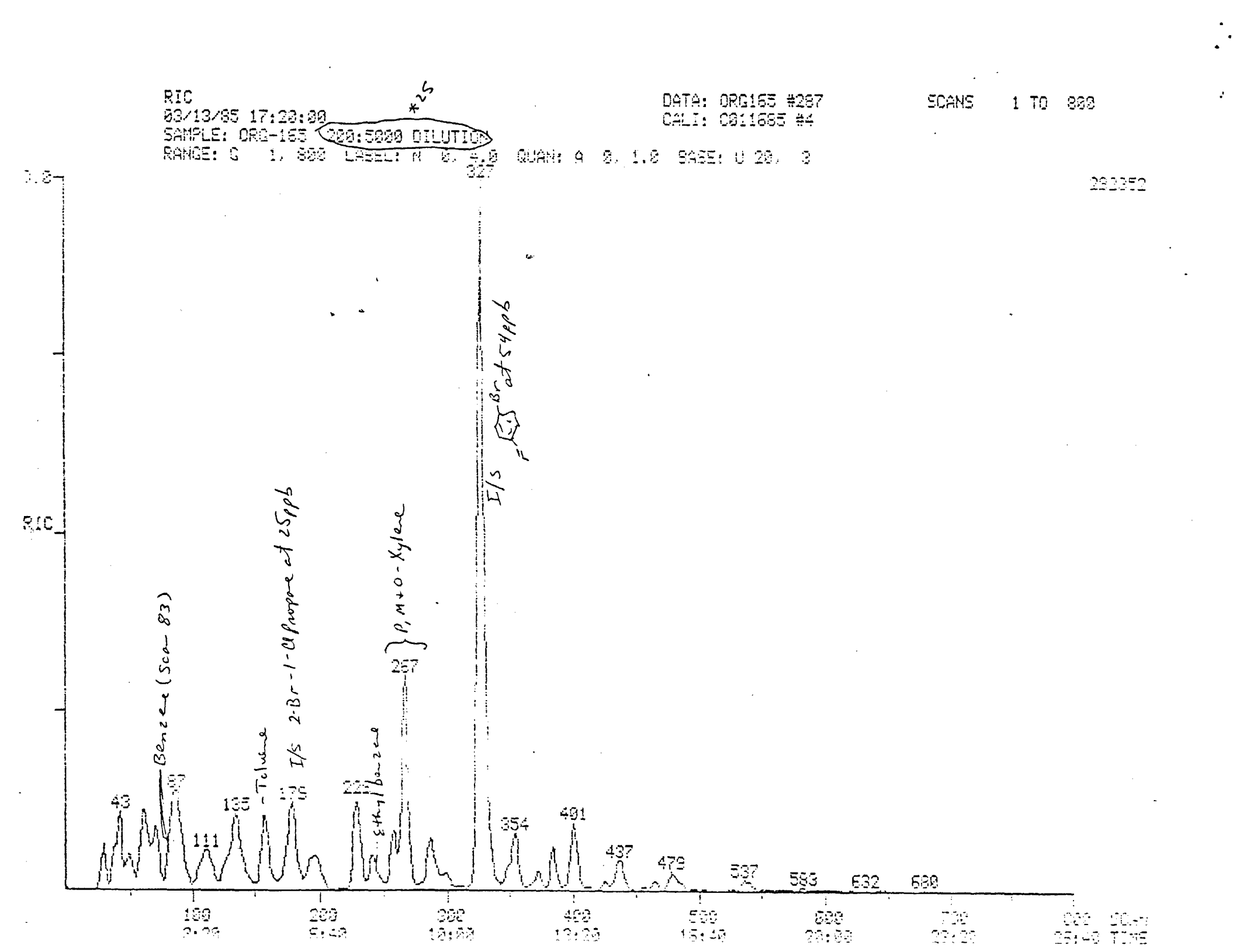
CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. Seal(s) broken by: _____ date: _____

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 3/13/85. Analyst's signature: K Meyer

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: _____


RIC
03/13/85 17:28:00
SAMPLE: ORG-165
RANGE: C 1, 800
DATA: ORG165 #287
CALI: C011685 #4
SCANS 1 TO 800
Benzene (Scan 83)
Toluene
I/S 2-Br-1-Chloropropane at 25ppb
Ethylbenzene
P, M+O-Xylene
I/S p-Bromofluorobenzene at 54ppb
43
57
111
135
257
327
354
401
437
479
537
583
632
680
RIC
TIME

N.M. SCIENTIFIC LABORATORY DIVISION
QUANTITATION REPORT FILE: ORG165

DATA: ORG165.TX
03/13/85 17:20:00
SAMPLE: ORG-165 200:5000 DILUTION
SUBMITTED BY: FDD ANALYST: REM

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

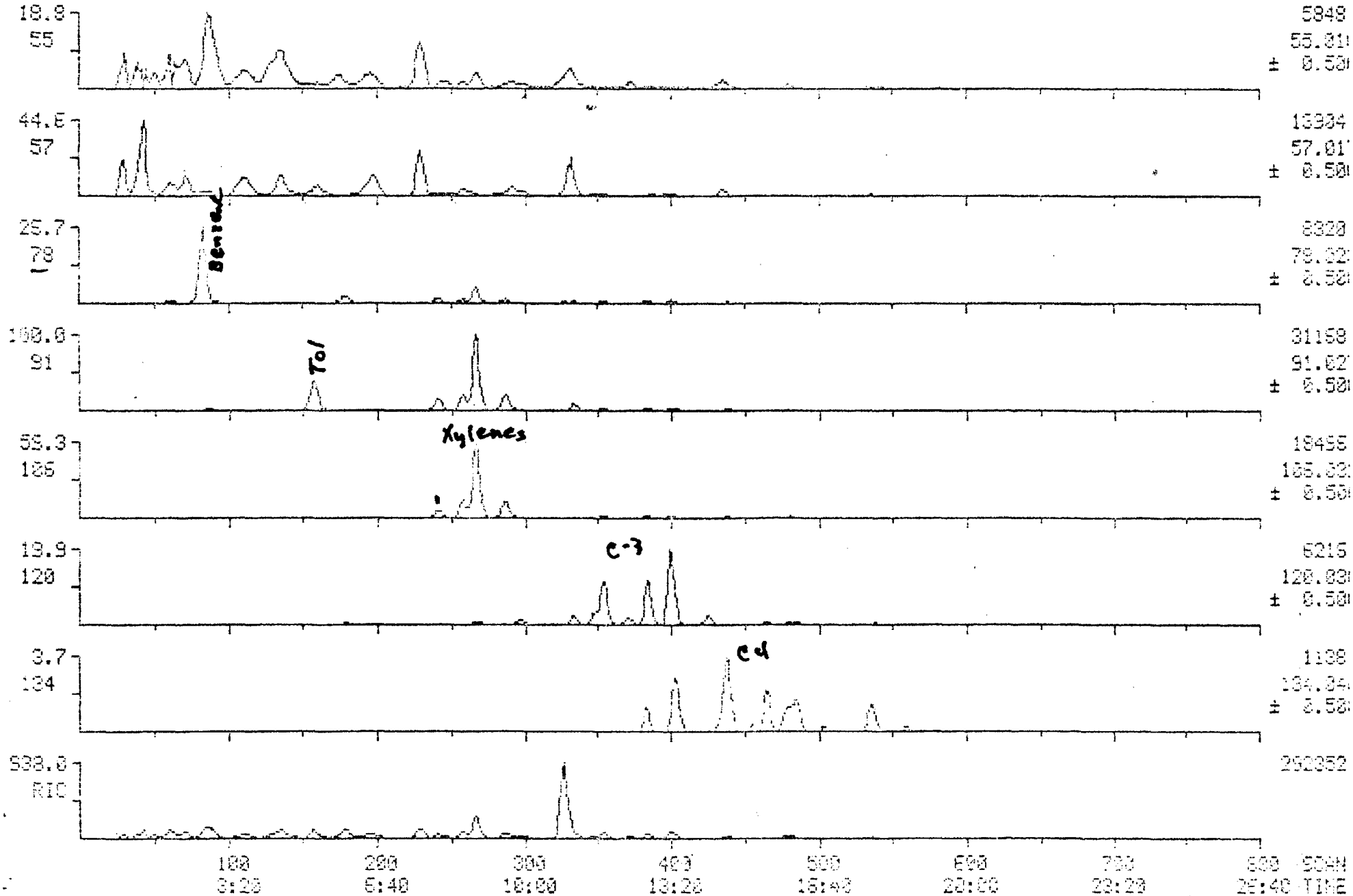
NO	NAME
1	I/S (4-FLUOROBROMOBENZENE)
2	I/S (2-BROMO-1-CHLOROPROPANE)
3	BENZENE
4	1,2-DICHLOROETHANE
5	TOLUENE
6	1,2-DIBROMOETHANE
7	ETHYLBENZENE
8	P-XYLENE
9	M-XYLENE
10	O-XYLENE

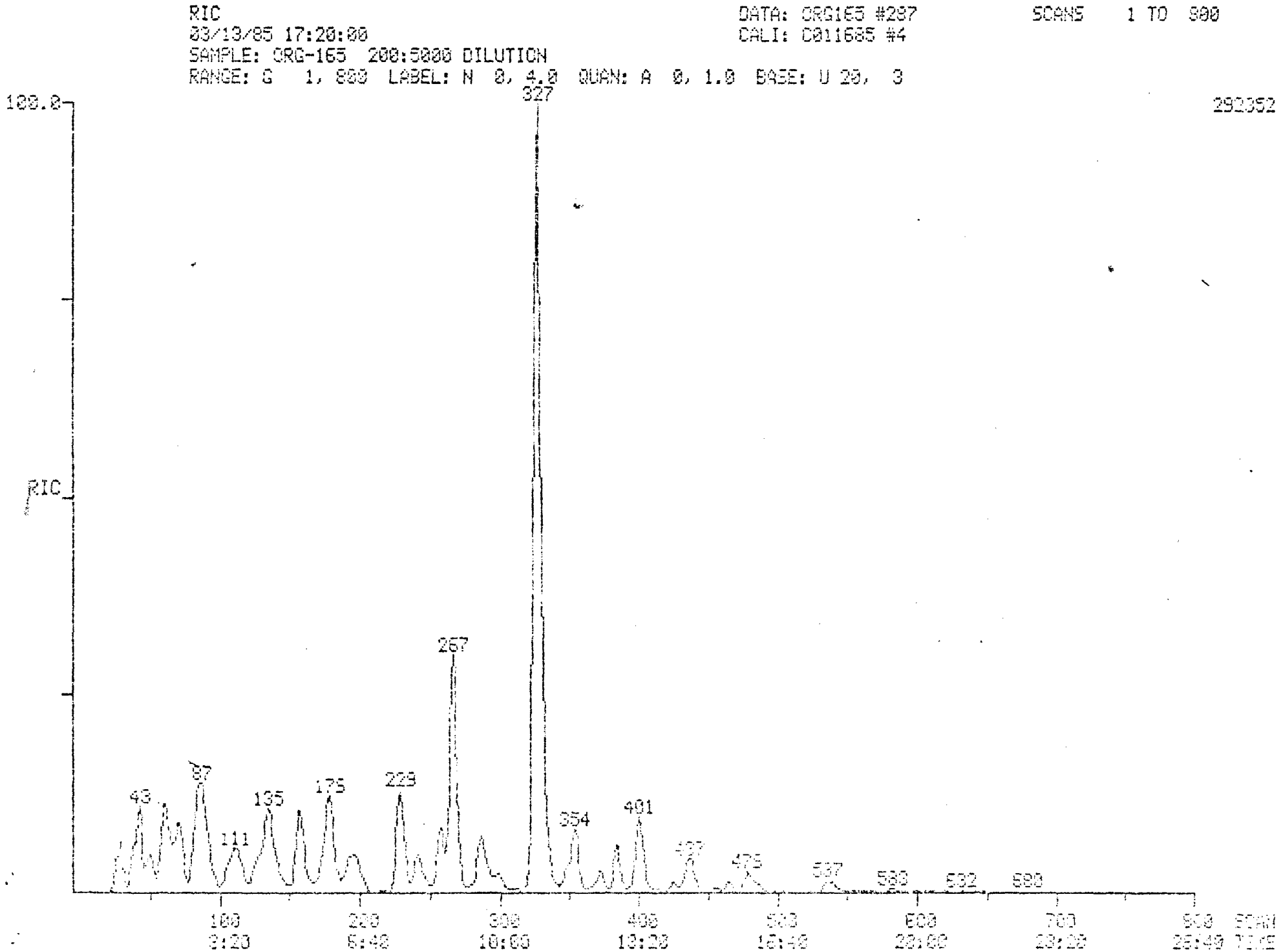
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT	*25
1	174	327	10:54	1	1.000	A BB	407586.	54.210	UG/L	50.18	I/S at 54
2	77	177	5:58	1	0.547	A BB	126628.	20.541	UG/L	19.02	I/S at 25
3	78	83	2:46	1	0.254	A BB	45424.	3.518	UG/L	3.26	88
4	NOT FOUND										
5	91	157	5:14	1	0.480	A BV	74949.	5.410	UG/L	5.01	135
6	NOT FOUND										
7	91	242	8:04	1	0.740	A BB	27640.	1.774	UG/L	1.64	44
8	91	258	8:36	1	0.787	A BV	32469.	3.187	UG/L	2.95	80
9	91	267	8:54	1	0.817	A VB	167729.	16.036	UG/L	14.85	400
10	91	287	9:34	1	0.878	A BB	36108.	3.345	UG/L	3.10	84

RIC + MASS CHROMATOGRAMS
03/13/85 17:20:00
SAMPLE: ORG-165 200:5000 DILUTION
RANGE: G 1, 800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3

DATA: ORG165 #287
CALI: C011685 #4

SCANS 1 TO 800




RIC
03/13/85 17:20:00
SAMPLE: ORG-165 200:5000 DILUTION
RANGE: G 1, 800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3
DATA: ORG1E5 #287
CALI: C011685 #4
SCANS 1 TO 800
100.0
290352
RIC
327
267
87
43
111
135
175
223
354
491
537
580
632
680
100
3:20
200
6:40
300
10:00
400
13:20
500
16:40
600
20:00
700
23:20
800
26:40
SCAN
TIME

WATER CHEMICAL ANALYSIS NAVAJO TRIBAL UTILITY AUTHORITY

OWNER COPY

SAMPLE NO. 6045

SAMPLE LOCATION DUNCAN FIELD PIT #1 DATE COLLECTED 2-25-85

DATE RECEIVED 2-26-85 COLLECTED BY DON PAYE

DATE OF FINAL ANALYSIS 3-29-85 ADDRESS IHS

TECHNICIAN AB MEQ.

TEST	PARAMETER	METHOD	RESULTS	mg/l
✓	ALKALINITY CO_3 18.03 / HCO_3 15.73	TITRAMETRIC	1,501.0 mg/l $CaCO_3$	
✓	CALCIUM .24	TITRAMETRIC OR AA	12.0 mg/l $CaCO_3$	75-200
✓	CHLORIDE 5.76	TITRAMETRIC	204.7 mg/l Cl	250
✓	TOTAL HARDNESS	TITRAMETRIC	20.0 mg/l $CaCO_3$	500
✓	MAGNESIUM .16	CALCULATED OR AA		
	MANGANESE	SPECTROPHOTOMETRIC OR AA		0.05
	IRON	SPECTROPHOTOMETRIC OR AA		0.3
✓	pH	ELECTRODE	8.25 @ 20C	6.5-8.5
	PHOSPHATE	SPECTROPHOTOMETRIC		
✓	POTASSIUM .07	FLAME PHOTOMETER	2.7 mg/l K	1000-2000
✓	SODIUM 35.0	FLAME PHOTOMETER	805.0 mg/l Na	
✓	SULFATE 11.57	~~TITRAMETRIC~~ turbidity	570.0 mg/l SO_4	250
✓	TOTAL DISSOLVED SOLIDS	ELECTRODE	1,655.5 mg/l $CaCO_3$	500
	TURBIDITY	NEPHELOMETER		
	FLUORIDE	ELECTRODE		1.4

REMARKS FORM NO. 5459

SAMPLE LOCATION [illegible]

DATE RECEIVED _____ COLLECTED BY _____

DATE OUT 3-29-85 ADDRESS _____

TECHNICIAN FH

TEST	PARAMETER	METHOD	RESULTS	MCL
X	ARSENIC	ATOMIC ABSORPTION	.1420	0.05
X	BARIUM	ATOMIC ABSORPTION	1.08	1.0
X	CADMIUM	ATOMIC ABSORPTION	.004	0.01
X	CHROMIUM	ATOMIC ABSORPTION	.0300	0.05
	IRON	ATOMIC ABSORPTION		N/A
X	LEAD	ATOMIC ABSORPTION	.0447	0.05
	MANGANESE	ATOMIC ABSORPTION		N/A
	MERCURY	FLAMELESS ATOMIC ABSORPTION	< .002	0.002
X	SELENIUM	ATOMIC ABSORPTION	.0765	0.01
X	SILVER	ATOMIC ABSORPTION	.0069	0.05
	NITRATE (AsN)	CADMIUM REDUCTION		10.0
	FLUORIDE	ELECTRODE		1.4

REV 8-83

FORM NO. 5460 (P) M

ADDRESS 4445

TECHNICIAN AB.

TEST	PARAMETER	METHOD	RESULTS	MCL
	ARSENIC	ATOMIC ABSORPTION		0.05
	BARIUM	ATOMIC ABSORPTION		1.0
	CADMIUM	ATOMIC ABSORPTION		0.01
	CHROMIUM	ATOMIC ABSORPTION		0.05
	IRON	ATOMIC ABSORPTION		N/A
	LEAD	ATOMIC ABSORPTION		0.05
	MANGANESE	ATOMIC ABSORPTION		N/A
	MERCURY	FLAMELESS ATOMIC ABSORPTION		0.002
	SELENIUM	ATOMIC ABSORPTION		0.01
	SILVER	ATOMIC ABSORPTION		0.05
✓	NITRATE (AsN)	~~CADMIUM REDUCTION~~ Probe	1.92 mg/l NO_3-N	10.0
	FLUORIDE	ELECTRODE		1.4

REV 8-83

REPORT TO: _____

LABORATORY _____

LAB NUMBER DRG-1661 2/27/85

85-0166-B

LD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water ☒ Soil ☐ Other _____

Water Supply and/or Code No. PIT #2

City & County DUNCAN OIL FIELD, SAN JUAN COUNTY, N.M.

Collected (date & time) (850225/1300) By (name) ZAMORA, M., Payne

pH=_____; Conductivity=_____umho/cm at _____°C; Chlorine Residual=_____

Dissolved Oxygen=_____mg/l; Alkalinity=_____; Flow Rate=_____

Sampling Location, Methods & Remarks (i.e. odors etc.)

preserved w cyclohexane

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed _____

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed _____

Method of Shipment to Laboratory _____.

THIS FORM ACCOMPANIES ____ septum vials with teflon-lined discs identified as:

specimen_____; duplicate_____; triplicate_____; blank(s)_____,

and_____ amber glass jug(s) with teflon-lined cap(s) identified as _____,

and_____ other container(s) (describe)_____ identified as _____.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from _____ to _____ at (location)_____ on (date & time)_____ and that the statements in this block are correct.

Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .

Signature(s)_____ _____

I (we) certify that this sample was transferred from _____ to _____ at (location)_____ on (date & time)_____ and that the statements in this block are correct.

Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .

Signature(s)_____ _____

ANALYSES REQUESTED

LAB. No.: ORG- 166

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN
	X	AROMATIC HYDROCARBON SCREEN
		HALOGENATED HYDROCARBON SCREEN
		GAS CHROMATOGRAPH/MASS SPECTROMETER
		SPECIFIC COMPOUNDS

QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBONS
		CHLORINATED HYDROCARBON PESTICIDES
		CHLOROPHENOXY ACID HERBICIDES
		HYDROCARBON FUEL SCREEN
		ORGANOPHOSPHATE PESTICIDES
		POLYCHLORINATED BIPHENYLS (PCB's)
		POLYNUCLEAR AROMATIC HYDROCARBONS
		TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
GC/MS Results			
Benzene	104		
~~Toluene~~	~~N.D @ 50*~~		
Toluene	137		
Ethylbenzene	40		
p-Xylene	71		
m-Xylene	341		
o-Xylene	73	* DETECTION LIMIT	50 ppb

REMARKS: Aliphatic compounds, 3 carbon substituted benzenes and 1- and 2-methylnaphthalene were also detected but not quantitated.

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. Seal(s) broken by: _____ date: _____

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

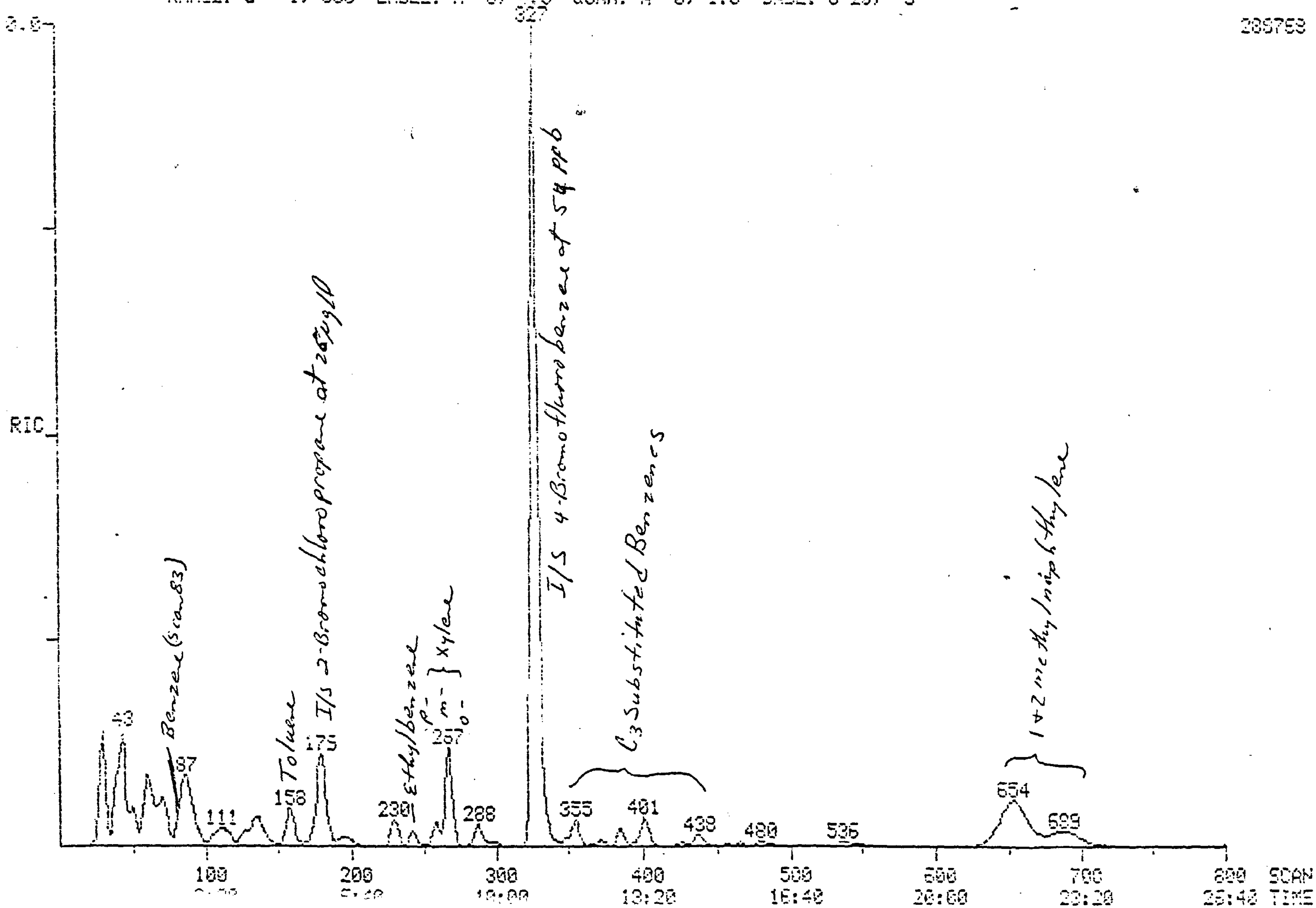
Date(s) of analysis: 3/13/85. Analyst's signature: A. Meyerhöfer

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: _____

RIC
03/13/85 15:28:00 *50
SAMPLE: ORG165 100:5000 DILUTION
RANGE: G 1, 800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3

DATA: ORG155 #287
CALI: C011685 #4

SCANS 1 TO 800



N.M. SCIENTIFIC LABORATORY DIVISION
QUANTITATION REPORT FILE: ORG166

DATA: ORG166.TX
03/13/85 15:20:00
SAMPLE: ORG166 100:5000 DILUTION
SUBMITTED BY: FED ANALYST: RFM

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

This is a set of compounds we look for in gasoline contamination of water cases.

NO	NAME
1	I/S (4-FLUOROBROMOBENZENE)
2	I/S (2-BROMO-1-CHLOROPROPANE)
3	BENZENE
4	1,2-DICHLOROETHANE
5	TOLUENE
6	1,2-DIBROMOETHANE
7	ETHYLBENZENE
8	P-XYLENE
9	M-XYLENE
10	O-XYLENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT	*50
1	174	327	10:54	1	1.000	A BB	397879.	54.210 UG/L	59.45	I/S at 5
2	77	177	5:58	1	0.547	A BB	131186. ✓	21.799 UG/L	23.91	I/S at 25
3	78	83	4:46	1	0.254	A BB	23994.	1.904 UG/L	2.09	104
4	NOT FOUND									
5	91	158	5:16	1	0.483	A BB	36787.	2.735 UG/L	3.00	137
6	NOT FOUND									
7	91	242	8:04	1	0.740	A BB	12327.	0.810 UG/L	0.89	40
8	91	250	8:36	1	0.789	A BV	14214.	1.429 UG/L	1.57	71
9	91	267	8:54	1	0.817	A VB	69713.	6.820 UG/L	7.49	341
10	91	288	9:36	1	0.881	A BB	15455.	1.467 UG/L	1.61	73

OWNER COPY

SAMPLE NO. 6046
SAMPLE LOCATION DUNCAN FIELD Pit #2 DATE COLLECTED 2-25-85
DATE RECEIVED 2-26-85 COLLECTED BY DON PAYNE
DATE OF FINAL ANALYSIS 3-29-85 ADDRESS FHS
TECHNICIAN AB

TEST	PARAMETER	METHOD	RESULTS	mg/l
✓	ALKALINITY CO_3 8.70 / HCO_3 15.73	TITRAMETRIC	1,221.0 mg/l $CaCO_3$	
✓	CALCIUM .20	TITRAMETRIC OR AA	10.0 mg/l $CaCO_3$	75-200
✓	CHLORIDE 3.45	TITRAMETRIC	122.5 mg/l Cl	250
✓	TOTAL HARDNESS	TITRAMETRIC	20.0 mg/l $CaCO_3$	500
✓	MAGNESIUM .20	CALCULATED OR AA	2.4 mg/l Mg	9.8
	MANGANESE	SPECTROPHOTOMETRIC OR AA		0.05
	IRON	SPECTROPHOTOMETRIC OR AA		0.3
✓	pH	ELECTRODE	8.7 @ 20C	6.5-8.5
	PHOSPHATE	SPECTROPHOTOMETRIC		
✓	POTASSIUM .04	FLAME PHOTOMETER	1.5 mg/l K	1000-2000
✓	SODIUM 34.4	FLAME PHOTOMETER	791.2 mg/l Na	
✓	SULFATE 4.64	TITRAMETRIC turbidity	223.0 mg/l SO_4	250
✓	TOTAL DISSOLVED SOLIDS	ELECTRODE	1,701.5 mg/l $CaCO_3$	500
	TURBIDITY	NEPHELOMETER		
	FLUORIDE	ELECTRODE		1.4

REMARKS

DATE OUT 3-21-85 ADDRESS FHS
TECHNICIAN AB

TEST	PARAMETER	METHOD	RESULTS	MCL
	ARSENIC	ATOMIC ABSORPTION		0.05
	BARIUM	ATOMIC ABSORPTION		1.0
	CADMIUM	ATOMIC ABSORPTION		0.01
	CHROMIUM	ATOMIC ABSORPTION		0.05
	IRON	ATOMIC ABSORPTION		N/A
	LEAD	ATOMIC ABSORPTION		0.05
	MANGANESE	ATOMIC ABSORPTION		N/A
	MERCURY	FLAMELESS ATOMIC ABSORPTION		0.002
	SELENIUM	ATOMIC ABSORPTION		0.01
	SILVER	ATOMIC ABSORPTION		0.05
✓	NITRATE (AsN)	CADMIUM REDUCTION	1.95 mg/l NO_3-N	10.0
	FLUORIDE	ELECTRODE		1.4

FORM NO. 5460 (P) M REV 8-83

DATE RECEIVED
DATE OUT 3-29-85 COLLECTED BY
TECHNICIAN ADDRESS

TEST	PARAMETER	METHOD	RESULTS	MCL
X	ARSENIC	ATOMIC ABSORPTION	.2315	0.05
X	BARIUM	ATOMIC ABSORPTION	1.2636	1.0
X	CADMIUM	ATOMIC ABSORPTION	.0026	0.01
X	CHROMIUM	ATOMIC ABSORPTION	.0227	0.05
	IRON	ATOMIC ABSORPTION		N/A
X	LEAD	ATOMIC ABSORPTION	.0451	0.05
	MANGANESE	ATOMIC ABSORPTION		N/A
	MERCURY	FLAMELESS ATOMIC ABSORPTION	<.002	0.002
X	SELENIUM	ATOMIC ABSORPTION	.1745	0.01
X	SILVER	ATOMIC ABSORPTION	.0099	0.05
	NITRATE (AsN)	CADMIUM REDUCTION		10.0
	FLUORIDE	ELECTRODE		1.4

FORM NO. 5460 (P) M REV 8-83

REPORT TO: _____

LABORATORY _____

LAB NUMBER ORG-167-A 2/27/85

85-0167-B

Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water ☒ Soil ☐ Other _____

Water Supply and/or Code No. PIT #3

City & County DURHAM O.L FIELD

Collected (date & time) 8502251130 By (name) M. ZAMAN, P. Payne

pH=_____; Conductivity=_____umho/cm at _____°C; Chlorine Residual=_____

Dissolved Oxygen=_____mg/l; Alkalinity=_____; Flow Rate=_____

Sampling Location, Methods & Remarks (i.e. odors etc.)

cyclohexane preservative

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed _____

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed _____

Method of Shipment to Laboratory _____.

THIS FORM ACCOMPANIES ____ septum vials with teflon-lined discs identified as:
specimen_____; duplicate_____; triplicate_____; blank(s)_____,
and_____ amber glass jug(s) with teflon-lined cap(s) identified as_____,
and_____ other container(s) (describe)_____ identified as_____.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from _____ to _____ at (location)_____ on (date & time)_____ and that the statements in this block are correct.

Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .

Signature(s)_____ _____

I (we) certify that this sample was transferred from _____ to _____ at (location)_____ on (date & time)_____ and that the statements in this block are correct.

Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .

Signature(s)_____ _____

ANALYSES REQUESTED

LAB. No.: ORG- 167

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN
	X	AROMATIC HYDROCARBON SCREEN
		HALOGENATED HYDROCARBON SCREEN
		GAS CHROMATOGRAPH/MASS SPECTROMETER
		SPECIFIC COMPOUNDS

QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBONS
		CHLORINATED HYDROCARBON PESTICIDE
		CHLOROPHENOXY ACID HERBICIDES
		HYDROCARBON FUEL SCREEN
		ORGANOPHOSPHATE PESTICIDES
		POLYCHLORINATED BIPHENYLS (PCB's)
		POLYNUCLEAR AROMATIC HYDROCARBONS
		TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
GC/MS Purgeables			
Cyclohexane	(Presumptive)		
Benzene	220		
p-Xylene	3		
m-Xylene	9		
		* DETECTION LIMIT	~10 ppb

REMARKS: Some 3 Carbon Substituted benzenes were also detected but not quantitated

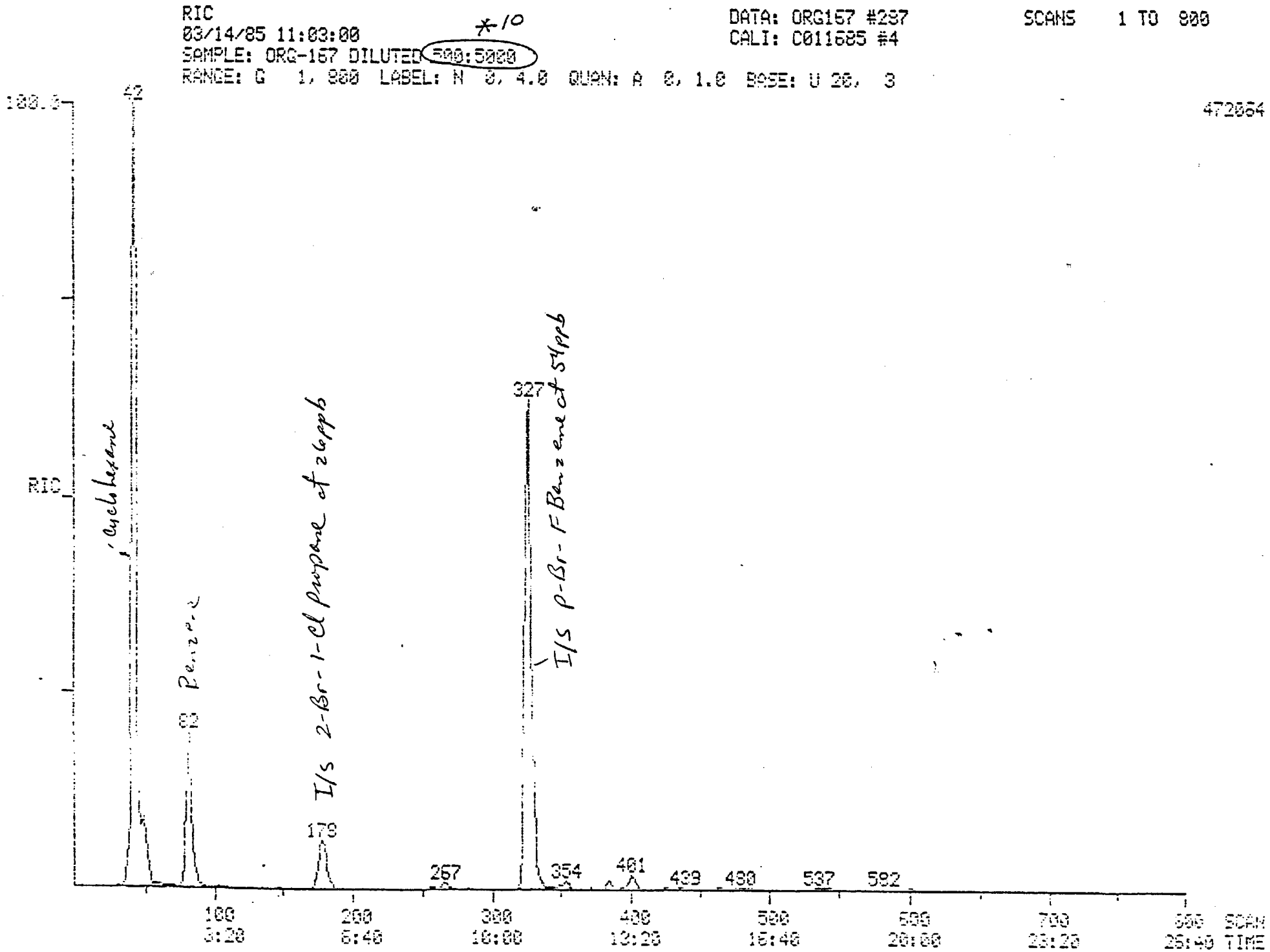
CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. Seal(s) broken by: _____ date: _____

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 3/14/85. Analyst's signature: K McCandless

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: _____


RIC
03/14/85 11:03:00
SAMPLE: ORG-157 DILUTED 500:5000
RANGE: G 1, 000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3
DATA: ORG157 #237
CALI: C011685 #4
SCANS 1 TO 800
*10
100.0
RIC
472064
42
cyclohexane
82
Benzene
179
I/S 2-Br-1-Cl propane at 24ppb
267
327
I/S p-Br-F Benzene at 54ppb
354
401
439
480
537
582
100
3:20
200
6:40
300
10:00
400
13:20
500
16:40
600
20:00
700
23:20
800
26:40
SCAN
TIME

N.H. SCIENTIFIC LABORATORY DIVISION
QUANTITATION REPORT . FILE: ORG167

DATA: ORG167.11
03/14/85 11:03:00
SAMPLE: ORG-167 DILUTED 500:5000
SUBMITTED BY: FOD ANALYST: REM

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	I/S (4-FLUOROBROMOBENZENE)
2	I/S (2-BROMO-1-CHLOROPROPANE)
3	BENZENE
4	1,2-DICHLOROETHANE
5	TOLUENE
6	1,2-DIBROMOETHANE
7	ETHYLBENZENE
8	P-XYLENE
9	M-XYLENE
10	O-XYLENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT	*10
1	174	327	10:54	1	1.000	A BB	407671.	54.210	UG/L	56.06	
2	77	170	5:56	1	0.544	A BB	119718.	19.416	UG/L	20.08	
3	78	82	2:44	1	0.251	A BB	281330.	21.783	UG/L	22.53	220
4	NOT FOUND										
5	NOT FOUND										
6	NOT FOUND										
7	91	241	8:02	1	0.737	A BB	1184.	0.076	UG/L	0.08	
8	91	250	8:36	1	0.789	A BV	3041.	0.298	UG/L	0.31	3
9	91	267	8:54	1	0.817	A VB	9657.	0.923	UG/L	0.95	9
10	NOT FOUND										

WATER CHEMICAL ANALYSIS — NAVAJO TRIBAL UTILITY AUTHORITY — OWNER COPY

SAMPLE NO. 6047
SAMPLE LOCATION DUNCAN Field Pit #3 — DATE COLLECTED 2-25-85
DATE RECEIVED 2-26-85 — COLLECTED BY DON PAYNE
DATE OF FINAL ANALYSIS 3-29-85 — ADDRESS FHS
TECHNICIAN AB

TEST	PARAMETER	meq.	METHOD	RESULTS	mg/l
✓	ALKALINITY CO_3 15.36 / HCO_3 12.13		TITRAMETRIC	1,201.0 mg/l $CaCO_3$	
✓	CALCIUM	.32	TITRAMETRIC OR AA	16.0 mg/l $CaCO_3$	75-200
✓	CHLORIDE	5.62	TITRAMETRIC	199.5 mg/l Cl	250
✓	TOTAL HARDNESS		TITRAMETRIC	56.0 mg/l $CaCO_3$	500
✓	MAGNESIUM	.80	CALCULATED OR AA	9.7 mg/l $CaCO_3$	
	MANGANESE		SPECTROPHOTOMETRIC OR AA		0.05
	IRON		SPECTROPHOTOMETRIC OR AA		0.3
✓	pH		ELECTRODE	7.7 @ 20C	6.5-8.5
	PHOSPHATE		SPECTROPHOTOMETRIC		
✓	POTASSIUM	.04	FLAME PHOTOMETER	1.5 mg/l K	1000-2000
✓	SODIUM	30.3	FLAME PHOTOMETER	696.9 mg/l Na	
✓	SULFATE	7.64	TITRAMETRIC ~~turbidity~~	367.0 mg/l SO_4	250
✓	TOTAL DISSOLVED SOLIDS		ELECTRODE	1,379.6 mg/l $CaCO_3$	500
	TURBIDITY		NEPHELOMETER		
	FLUORIDE		ELECTRODE		1.4

DATE RECEIVED _____ COLLECTED BY _____
DATE OUT 3-29-85 ADDRESS _____
TECHNICIAN _____

TEST	PARAMETER	METHOD	RESULTS	MCL
X	ARSENIC	ATOMIC ABSORPTION	.2406	0.05
X	BARIUM	ATOMIC ABSORPTION	.5385	1.0
X	CADMIUM	ATOMIC ABSORPTION	< .001	0.01
X	CHROMIUM	ATOMIC ABSORPTION	.036	0.05
	IRON	ATOMIC ABSORPTION		N/A
X	LEAD	ATOMIC ABSORPTION	.0435	0.05
	MANGANESE	ATOMIC ABSORPTION		N/A
	MERCURY	FLAMELESS ATOMIC ABSORPTION	< .002	0.002
X	SELENIUM	ATOMIC ABSORPTION	.0810	0.01
X	SILVER	ATOMIC ABSORPTION	.0052	0.05
	NITRATE (AsN)	CADMIUM REDUCTION		10.0
	FLUORIDE	ELECTRODE		1.4

FORM NO. 5460 (P) M — REV 8-83

DATE OUT 3-21-85 ADDRESS FHS
TECHNICIAN AB

TEST	PARAMETER	METHOD	RESULTS	MCL
	ARSENIC	ATOMIC ABSORPTION		0.05
	BARIUM	ATOMIC ABSORPTION		1.0
	CADMIUM	ATOMIC ABSORPTION		0.01
	CHROMIUM	ATOMIC ABSORPTION		0.05
	IRON	ATOMIC ABSORPTION		N/A
	LEAD	ATOMIC ABSORPTION		0.05
	MANGANESE	ATOMIC ABSORPTION		N/A
	MERCURY	FLAMELESS ATOMIC ABSORPTION		0.002
	SELENIUM	ATOMIC ABSORPTION		0.01
	SILVER	ATOMIC ABSORPTION		0.05
✓	NITRATE (AsN)	CADMIUM REDUCTION	10.9 mg/l NO_3-N	10.0
	FLUORIDE	ELECTRODE		1.4

FORM NO. 5460 (P) M — REV 8-83

REPORT TO: Masud Zaman
Nav. Water Resources Div
P.O. Box 1374
Window Rock, AZ 865..

85-0168-B

LABORATORY STATE LAB

LAB NUMBER JRG-168-F
2/27/85

...D Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water ☑ Soil ☐ Other _____

Water Supply and/or Code No. PIT #4

City & County Duncan Oil Field, San Juan County

Collected (date & time) 850225/1200 By (name) Zaman, M., Payne

pH=_____; Conductivity=_____umho/cm at_____°C; Chlorine Residual=_____

Dissolved Oxygen=_____mg/l; Alkalinity=_____; Flow Rate=_____

Sampling Location, Methods & Remarks (i.e. odors etc.)

cyclohexane preservative

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed _____

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed _____

Method of Shipment to Laboratory _____.

THIS FORM ACCOMPANIES ___ septum vials with teflon-lined discs identified as:
specimen_____; duplicate_____; triplicate_____; blank(s)_____,
and_____ amber glass jug(s) with teflon-lined cap(s) identified as_____,
and_____ other container(s) (describe)_____ identified as_____.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from _____ to _____ at (location)_____ on (date & time)_____ and that the statements in this block are correct.

Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .

Signature(s)_____ _____

I (we) certify that this sample was transferred from _____ to _____ at (location)_____ on (date & time)_____ and that the statements in this block are correct.

Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .

Signature(s)_____ _____

ANALYSES REQUESTED

LAB. No.: ORG- 168

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN
	X	AROMATIC HYDROCARBON SCREEN
		HALOGENATED HYDROCARBON SCREEN
		GAS CHROMATOGRAPH/MASS SPECTROMETER
		SPECIFIC COMPOUNDS

QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBONS
		CHLORINATED HYDROCARBON PESTICIDES
		CHLOROPHENOXY ACID HERBICIDES
		HYDROCARBON FUEL SCREEN
		ORGANOPHOSPHATE PESTICIDES
		POLYCHLORINATED BIPHENYLS (PCB's)
		POLYNUCLEAR AROMATIC HYDROCARBONS
		TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
benzene@	@not pure Bz	toluene	none detected
ethyl-benzene	5	ortho-xylene	none detected
para-xylene	8		
meta-Xylene	170		
Halogenated purgeables	none detected		
		* DETECTION LIMIT	1 µg/l

REMARKS: @One peak equivalent to 85 ppb pure benzene. Twenty-two other peaks detected by PID. Sample received in a pre-prep septum vial bottle; put in a gallon jug with headspace. *Unable to quantitate benzene due to interference.

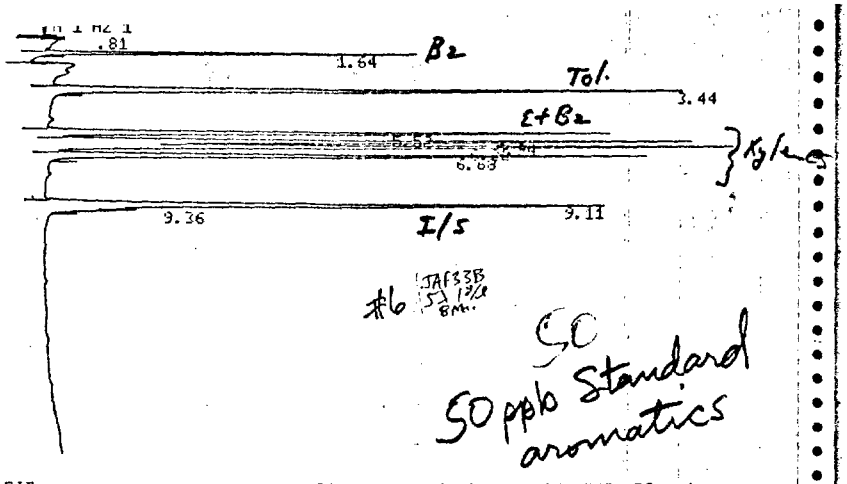
CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes___ NO X. Seal(s) broken by:_____ date:_____

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 2-28 & 3-13-85. Analyst's signature: JL Tunney

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature:_____

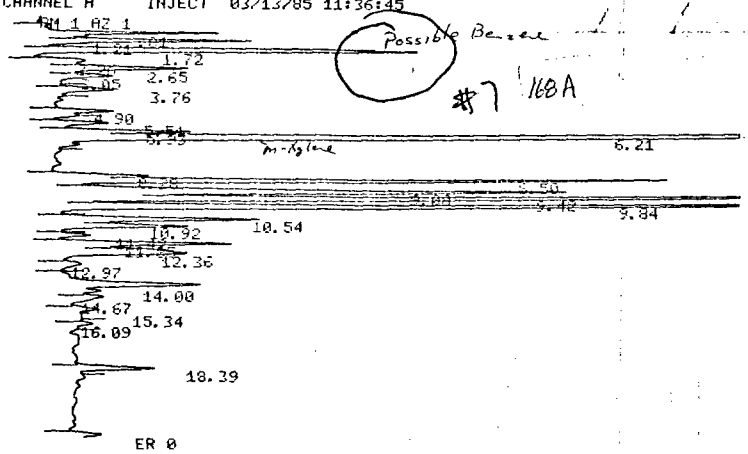


PID 03/13/85 11:09:38 CH= "A" PS= 1.

FILE 1. METHOD 0. RUN 446 INDEX 446

PEAK#	AREA%	RT	AREA	BC
1	5.667	1.64	23036	01
2	15.317	3.44	62265	01
3	13.794	5.52	56071	02
4	16.367	5.94	66531	02
5	17.236	6.22	70063	02
6	13.98	6.68	56829	03
7	15.466	9.11	62871	02
8	2.173	9.36	8832	03
TOTAL	100.	-	406498	

CHANNEL A INJECT 03/13/85 11:36:45



ER 0

PID 03/13/85 11:36:45 CH= "A" PS= 1.

FILE 1. METHOD 0. RUN 447 INDEX 447

PEAK#	AREA%	RT	AREA	BC
1	2.079	0.81	20257	02
2	2.62	1.21	25529	02
3	5.302	1.72 ✓	51669	02
4	0.841	2.26	8197	02
5	2.232	2.65	21748	02
6	1.005	3.05	9790	03
7	0.666	3.76	6494	01
8	0.428	4.9	4167	01
9	0.718	5.51 ✓	6996	02
10	1.34	5.93 ✓	13056	02
11	29.862	6.21 ✓	291009	03
12	0.886	8.28	8633	02
13	7.095	8.5	69046	02
14	7.649	9.09 ✓		

WATER CHEMICAL ANALYSIS NAVAJO TRIBAL UTILITY AUTHORITY

OWNER COPY

SAMPLE NO. 6048

SAMPLE LOCATION DUNKIN Field Pit 4 DATE COLLECTED 2-25-85

DATE RECEIVED 2-26-85 COLLECTED BY DON PAYNE

DATE OF FINAL ANALYSIS 3-29-85 ADDRESS IHS

TECHNICIAN AB Mag.

TEST	PARAMETER	METHOD	RESULTS	mg/l
✓	ALKALINITY CO_3 2.23, HCO_3 149	TITRAMETRIC	734.5 mg/l $CaCO_3$	
✓	CALCIUM 1.76	TITRAMETRIC OR AA	88.1 mg/l $CaCO_3$	75-200
✓	CHLORIDE 1.77	TITRAMETRIC	63.0 mg/l Cl	250
✓	TOTAL HARDNESS [redacted]	TITRAMETRIC	108.0 mg/l $CaCO_3$	500
✓	MAGNESIUM .40	CALCULATED OR AA	9.8 mg/l Mg	
	MANGANESE	SPECTROPHOTOMETRIC OR AA		0.05
	IRON	SPECTROPHOTOMETRIC OR AA		0.3
✓	pH	ELECTRODE	7.6 @ 20C	6.5-8.5
	PHOSPHATE	SPECTROPHOTOMETRIC		
✓	POTASSIUM .06	FLAME PHOTOMETER	2.3 mg/l K	1000-2000
✓	SODIUM 13.9	FLAME PHOTOMETER	319.7 mg/l Na	
✓	SULFATE 1.39	TITRAMETRIC Turbidity	67.0 mg/l SO_4	250
✓	TOTAL DISSOLVED SOLIDS	ELECTRODE	603.8 mg/l $CaCO_3$	500
	TURBIDITY	NEPHELOMETER		
	FLUORIDE	ELECTRODE		1.4

REMARKS
FORM NO. 5459

DATE RECEIVED

DATE OUT 3-29-85 ADDRESS

TECHNICIAN FW

TEST	PARAMETER	METHOD	RESULTS	MCL
X	ARSENIC	ATOMIC ABSORPTION	.1451	0.05
X	BARIUM	ATOMIC ABSORPTION	.8533	1.0
X	CADMIUM	ATOMIC ABSORPTION	.0028	0.01
X	CHROMIUM	ATOMIC ABSORPTION	.0157	0.05
	IRON	ATOMIC ABSORPTION		N/A
X	LEAD	ATOMIC ABSORPTION	.1475	0.05
	MANGANESE	ATOMIC ABSORPTION		N/A
X	MERCURY	FLAMELESS ATOMIC ABSORPTION	< .002	0.002
X	SELENIUM	ATOMIC ABSORPTION	.0968	0.01
X	SILVER	ATOMIC ABSORPTION	< .001	0.05
	NITRATE (AsN)	CADMIUM REDUCTION		10.0
	FLUORIDE	ELECTRODE		1.4

FORM NO. 5460 (P) M REV 8-83

DATE OUT 3-29-85 ADDRESS IHS

TECHNICIAN AB

TEST	PARAMETER	METHOD	RESULTS	MCL
	ARSENIC	ATOMIC ABSORPTION		0.05
	BARIUM	ATOMIC ABSORPTION		1.0
	CADMIUM	ATOMIC ABSORPTION		0.01
	CHROMIUM	ATOMIC ABSORPTION		0.05
	IRON	ATOMIC ABSORPTION		N/A
	LEAD	ATOMIC ABSORPTION		0.05
	MANGANESE	ATOMIC ABSORPTION		N/A
	MERCURY	FLAMELESS ATOMIC ABSORPTION		0.002
	SELENIUM	ATOMIC ABSORPTION		0.01
	SILVER	ATOMIC ABSORPTION		0.05
✓	NITRATE (AsN)	CADMIUM REDUCTION Probe	120.0 mg/l NO_3-N	10.0
	FLUORIDE	ELECTRODE		1.4

REV 8-83

FORM NO. 5460 (P) M

LABORATORY

LAB NUMBER ORG-169-A 2/27/85

85-0169-B Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES [illegible] Y REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water ☒ Soil ☐ Other

Water Supply and/or Code No. PIT #5

City & County DUNCAN OIL FIELD, SAN JUAN COUNTY, N.M.

Collected (date & time) 8502251200 By (name) ZAMAN, M., Payne

pH=____; Conductivity=____umho/cm at____°C; Chlorine Residual=____

Dissolved Oxygen=____mg/l; Alkalinity=____; Flow Rate=____

Sampling Location, Methods & Remarks (i.e. odors etc.)

cyclohexane preservative??

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed____

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed____

Method of Shipment to Laboratory____.

THIS FORM ACCOMPANIES____ septum vials with teflon-lined discs identified as:

specimen____; duplicate____; triplicate____; blank(s)____,

and____ amber glass jug(s) with teflon-lined cap(s) identified as____,

and____ other container(s) (describe)____ identified as____.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from____ to

____ at (location)____ on

(date & time)____ and that the statements in this block are correct.

Disposition of Sample____. Seal(s) Intact: Yes ☐ No ☐ .

Signature(s)____

I (we) certify that this sample was transferred from____ to

____ at (location)____ on

(date & time)____ and that the statements in this block are correct.

Disposition of Sample____. Seal(s) Intact: Yes ☐ No ☐ .

Signature(s)____

ANALYSES REQUESTED

LAB. No.: ORG- 169

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN
	X	AROMATIC HYDROCARBON SCREEN
		HALOGENATED HYDROCARBON SCREEN
		GAS CHROMATOGRAPH/MASS SPECTROMETER
		SPECIFIC COMPOUNDS

QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBONS
		CHLORINATED HYDROCARBON PESTICIDES
		CHLOROPHENOXY ACID HERBICIDES
		HYDROCARBON FUEL SCREEN
		ORGANOPHOSPHATE PESTICIDES
		POLYCHLORINATED BIPHENYLS (PCB's)
		POLYNUCLEAR AROMATIC HYDROCARBONS
		TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
halogenated purgeables	none detected	toluene	none detected
benzene	21	ethyl benzene	N.D.
meta-xylene	4	para xylene	N.D. (trace)
		ortho xylene	N.D.
		* DETECTION LIMIT	1 ppm/l

REMARKS: Sample was not taken in a proper septum vial bottle, but in a gallon bottle with a headspace. Seven other peaks detected by PID.

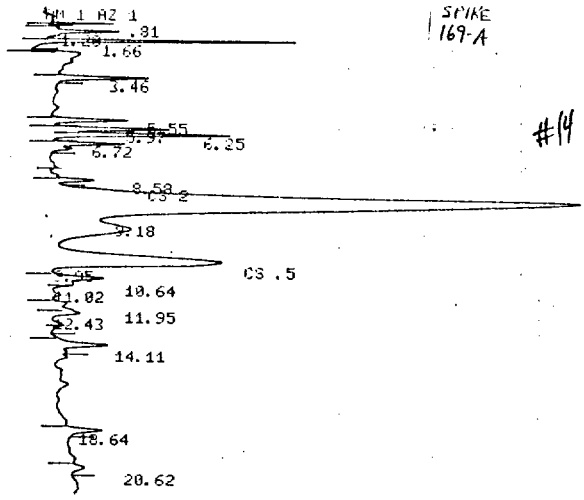
CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. Seal(s) broken by: _____ date: _____

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 2-28-13-85. Analyst's signature: _____

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: _____



SPIKE 169-A

#14

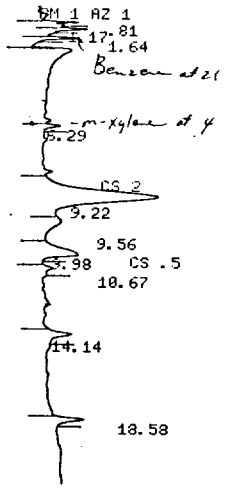
PID 02/28/85 17:21:16 CH= "A" PS= 1.

FILE 1. METHOD 0. RUN 286 INDEX 286

PEAK#	AREA%	RT	AREA BC
1	1.059	0.81	2297 01
2	4.218	1.2	9146 02
3	8.018	1.66	17384 03
4	3.987	3.46	8645 01
5	3.417	5.55	7408 01
6	5.17	5.97	11209 02
7	8.012	6.25	17372 03
8	4.024	6.72	8725 01
9	1.45	8.58	3143 01
10	33.792	9.18	73266 02
11	9.093	9.95	19715 02
12	4.174	10.64	9050 02
13	1.77	11.02	3838 02
14	1.687	11.95	3658 02
15	3.403	12.43	7378 03
16	3.634	14.11	7880 01
17	2.188	18.64	4743 01
18	0.902	20.62	1956 01
TOTAL	100.		216813

029

CHANNEL A INJECT 02/28/85 17:49:27



169-A

#15

PID 02/28/85 17:49:27 CH= "A" PS= 1.

FILE 1. METHOD 0. RUN 287 INDEX 287

PEAK#	AREA%	RT	AREA BC
1	3.107	0.81	1134 01
2	5.572	1.17	2034 01
3	7.128	1.64	2602 01

WATER CHEMICAL ANALYSIS

NAVAJO TRIBAL UTILITY AUTHORITY

OWNER COPY

SAMPLE NO. 6049

SAMPLE LOCATION DUNCAN FIELD Pit #5

DATE COLLECTED 2-25-85

DATE RECEIVED 2-26-85

COLLECTED BY DON PAYNE

DATE OF FINAL ANALYSIS 3-29-85

ADDRESS IHS

TECHNICIAN AB mg.

TEST	PARAMETER	METHOD	RESULTS	mg/l
✓	ALKALINITY CO_3 & HCO_3 2.49	TITRAMETRIC	152.0 mg/l $CaCO_3$	
✓	CALCIUM 3.52	TITRAMETRIC OR AA	176.3 mg/l $CaCO_3$	75-200
✓	CHLORIDE .34	TITRAMETRIC	12.1 mg/l Cl	250
✓	TOTAL HARDNESS	TITRAMETRIC	216.0 mg/l $CaCO_3$	500
✓	MAGNESIUM .80	CALCULATED OR AA	9.7 mg/l Mg	
	MANGANESE	SPECTROPHOTOMETRIC OR AA		0.05
	IRON	SPECTROPHOTOMETRIC OR AA		0.3
✓	pH	ELECTRODE	7.9 @ 20C	6.5-8.5
	PHOSPHATE	SPECTROPHOTOMETRIC		
✓	POTASSIUM .02	FLAME PHOTOMETER	0.70 mg/l K	1000-2000
✓	SODIUM 1.6	FLAME PHOTOMETER	36.8 mg/l Na	
✓	SULFATE .33	TITRAMETRIC turbidity	15.8 mg/l SO_4	250
✓	TOTAL DISSOLVED SOLIDS	ELECTRODE	234.3 mg/l $CaCO_3$	500
	TURBIDITY	NEPHELOMETER		
	FLUORIDE	ELECTRODE		1.4

DATE RECEIVED 11/7/85

COLLECTED BY

DATE OUT 3-29-85

ADDRESS

TECHNICIAN AB

TEST	PARAMETER	METHOD	RESULTS	MCL
	ARSENIC	ATOMIC ABSORPTION		0.05
X	BARIUM	ATOMIC ABSORPTION	.0545	1.0
X	CADMIUM	ATOMIC ABSORPTION	.0012	0.01
X	CHROMIUM	ATOMIC ABSORPTION	.0091	0.05
	IRON	ATOMIC ABSORPTION		N/A
X	LEAD	ATOMIC ABSORPTION	.0193	0.05
	MANGANESE	ATOMIC ABSORPTION		N/A
	MERCURY	FLAMELESS ATOMIC ABSORPTION	<.002	0.002
X	SELENIUM	ATOMIC ABSORPTION	.0128	0.01
X	SILVER	ATOMIC ABSORPTION	<.001	0.05
	NITRATE (AsN)	CADMIUM REDUCTION		10.0
	FLUORIDE	ELECTRODE		1.4

FORM NO. 5460 (P) M

REV 8-83

TECHNICIAN AB

TEST	PARAMETER	METHOD	RESULTS	MCL
	ARSENIC	ATOMIC ABSORPTION		0.05
	BARIUM	ATOMIC ABSORPTION		1.0
	CADMIUM	ATOMIC ABSORPTION		0.01
	CHROMIUM	ATOMIC ABSORPTION		0.05
	IRON	ATOMIC ABSORPTION		N/A
	LEAD	ATOMIC ABSORPTION		0.05
	MANGANESE	ATOMIC ABSORPTION		N/A
	MERCURY	FLAMELESS ATOMIC ABSORPTION		0.002
	SELENIUM	ATOMIC ABSORPTION		0.01
	SILVER	ATOMIC ABSORPTION		0.05
✓	NITRATE (AsN)	CADMIUM REDUCTION	2.5 mg/l NO_3-N	10.0
	FLUORIDE	ELECTRODE		1.4

FORM NO. 5460 (P) M

REV 8-8

REPORT TO: _____

LABORATORY _____

LAB NUMBER ORG-170-F 2/27/85

85-0170-B

_____ SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water ☒ Soil ☐ Other _____

Water Supply and/or Code No. PIT #6

City & County DUNCAN OIL FIELD, SAN JUAN COUNTY, NM

Collected (date & time) (850225 1400) By (name) ZAMAN, M.

pH=_____; Conductivity=_____umho/cm at _____°C; Chlorine Residual=_____

Dissolved Oxygen=_____mg/l; Alkalinity=_____; Flow Rate=_____

Sampling Location, Methods & Remarks (i.e. odors etc.)

preserved w cyclohexane

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed _____

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed _____

Method of Shipment to Laboratory _____.

THIS FORM ACCOMPANIES ____ septum vials with teflon-lined discs identified as:

specimen _____; duplicate _____; triplicate _____; blank(s) _____,

and _____ amber glass jug(s) with teflon-lined cap(s) identified as _____,

and _____ other container(s) (describe) _____ identified as _____.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from _____ to _____ at (location) _____ on (date & time) _____ and that the statements in this block are correct.

Disposition of Sample _____. Seal(s) Intact: Yes ☐ No ☐ .

Signature(s) _____ _____

I (we) certify that this sample was transferred from _____ to _____ at (location) _____ on (date & time) _____ and that the statements in this block are correct.

Disposition of Sample _____. Seal(s) Intact: Yes ☐ No ☐ .

Signature(s) _____ _____

ANALYSES REQUESTED

LAB. No.: ORG- 170

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN
	X	AROMATIC HYDROCARBON SCREEN
		HALOGENATED HYDROCARBON SCREEN
		GAS CHROMATOGRAPH/MASS SPECTROMETER
		SPECIFIC COMPOUNDS

QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBONS
		CHLORINATED HYDROCARBON PESTICIDES
		CHLOROPHENOXY ACID HERBICIDES
		HYDROCARBON FUEL SCREEN
		ORGANOPHOSPHATE PESTICIDES
		POLYCHLORINATED BIPHENYLS (PCB's)
		POLYNUCLEAR AROMATIC HYDROCARBONS
		TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
halogenated purgeables	none detected	Toluene	none detected*
benzene	160	ethyl benzene	N.D.*
		para-Xylene	N.D.*
		meta-Xylene	N.D.*
		ortho-Xylene	N.D.*
		* DETECTION LIMIT	1 ppm

REMARKS: Samples was not taken in a proper septum vial bottle but in a gallon jug bottle with a head space. One dia. peak detected by PID.

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. Seal(s) broken by: ___ date: ___

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 2-28-13-85. Analyst's signature: [signature]

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: ___

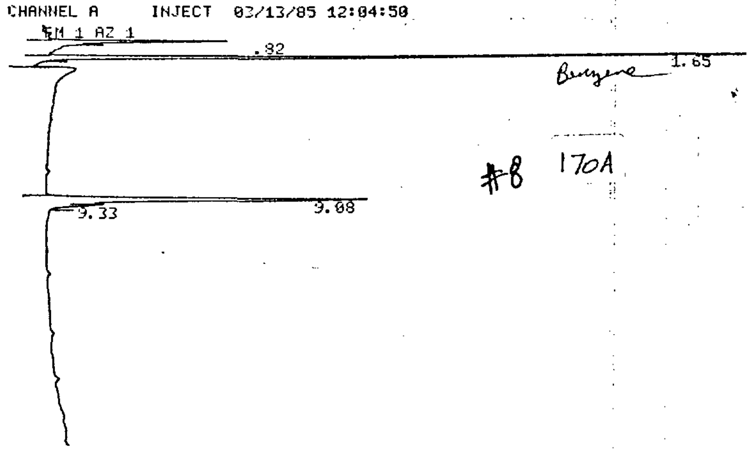
ER 0

PID 03/13/85 11:36:45 CH= "A" PS= 1.

FILE 1. METHOD 0. RUN 447 INDEX 447

PEAK#	AREA%	RT	AREA	BC
1	2.079	0.81	20257	02
2	2.62	1.21	25529	02
3	5.302	1.72 ✓	51669	02
4	0.841	2.26	8197	02
5	2.232	2.65	21748	02
6	1.005	3.05	9790	03
7	0.666	3.76	6494	01
8	0.428	4.9	4167	01
9	0.718	5.51 ✓	6996	02
10	1.34	5.93 ✓	13056	02
11	29.862	6.21 ✓	291009	03
12	0.886	8.28	8633	02
13	7.085	8.5	69046	02
14	7.649	9.08 ✓	74541	02
15	10.88	9.42	106024	02
16	10.896	9.84	106185	03
17	2.533	10.54	24688	02
18	1.826	10.92	17798	03
19	0.349	11.42	3400	02
20	2.372	11.85	23115	02
21	3.046	12.36	29685	02
22	0.393	12.97	3826	03
23	2.838	14.	27661	02
24	0.737	14.67	7187	02
25	0.322	15.34	3138	03
26	0.134	16.09	1303	01
27	0.961	18.39	9369	01
TOTAL	100.		974511	

CHANNEL A INJECT 03/13/85 12:04:50



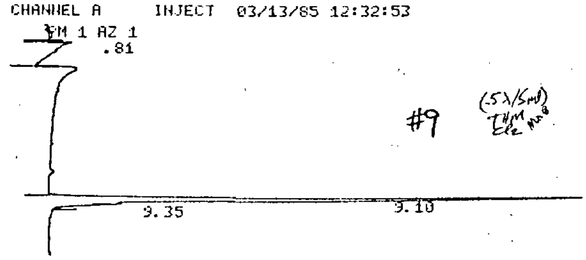
165

PID 03/13/85 12:04:50 CH= "A" PS= 1.

FILE 1. METHOD 0. RUN 448 INDEX 448

PEAK#	AREA%	RT	AREA	BC
1	10.207	0.82	11456	01
2	51.722	1.65	58052	01
3	32.826	9.08 ✓	36843	02
4	5.245	9.33	5887	03
TOTAL	100.		112238	

CHANNEL A INJECT 03/13/85 12:32:53



85-0253-C

REPORT TO: Masud Zu Zaman
Division of Water Resources
P.O. Box 308, Window Rock
Navajo Nation (Arizona) 86515

LABORATORY 3/19/85

LAB NUMBER OR. 253 A, B.

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water ☑ Soil ☐ Other

Water Supply and/or Code No.

City & County Window Rock, Arizona

Collected (date & time) 3/8/85 12.15 pm By (name) Zaman

pH=_____; Conductivity=_____umho/cm at_____°C; Chlorine Residual=_____

Dissolved Oxygen=_____mg/l; Alkalinity=_____; Flow Rate=_____

Sampling Location, Methods & Remarks (i.e. odors etc.)
Duncan Oil Field. Pit #3.

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed_____
I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed_____

Method of Shipment to Laboratory_____.
THIS FORM ACCOMPANIES 2 septum vials with teflon-lined discs identified as:
specimen_____; duplicate_____; triplicate_____; blank(s)_____,
and____ amber glass jug(s) with teflon-lined cap(s) identified as_____,
and____ other container(s) (describe)_____ identified as_____.
Containers are marked as follows to indicate preservation (circle):
NP: No preservation; sample stored at room temperature (~20°C).
P-ICE: Sample stored in an ice bath.
P-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from_____ to
_____ at (location)_____ on
(date & time)_____ and that the statements in this block are correct.
Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .
Signature(s)_____

I (we) certify that this sample was transferred from_____ to
_____ at (location)_____ on
(date & time)_____ and that the statements in this block are correct.
Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .
Signature(s)_____

ANALYSIS REQUESTED

LAB. No.: ORG- 253

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN
		AROMATIC HYDROCARBON SCREEN
		HALOGENATED HYDROCARBON SCREEN
	X	GAS CHROMATOGRAPH/MASS SPECTROMETER
		SPECIFIC COMPOUNDS

QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBONS
		CHLORINATED HYDROCARBON PESTICIDES
		CHLOROPHENOXY ACID HERBICIDES
		HYDROCARBON FUEL SCREEN
		ORGANOPHOSPHATE PESTICIDES
		POLYCHLORINATED BIPHENYLS (PCB's)
		POLYNUCLEAR AROMATIC HYDROCARBONS
		TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
m-Xylene	59		
Numerous Aliphatics	10 - 40 range		
Numerous C3 and C4 Substituted benzenes	20 - 40 ppb range		
		* DETECTION LIMIT	5 ug/l

REMARKS: No benzene or toluene detected

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. Seal(s) broken by: _____ date: _____

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

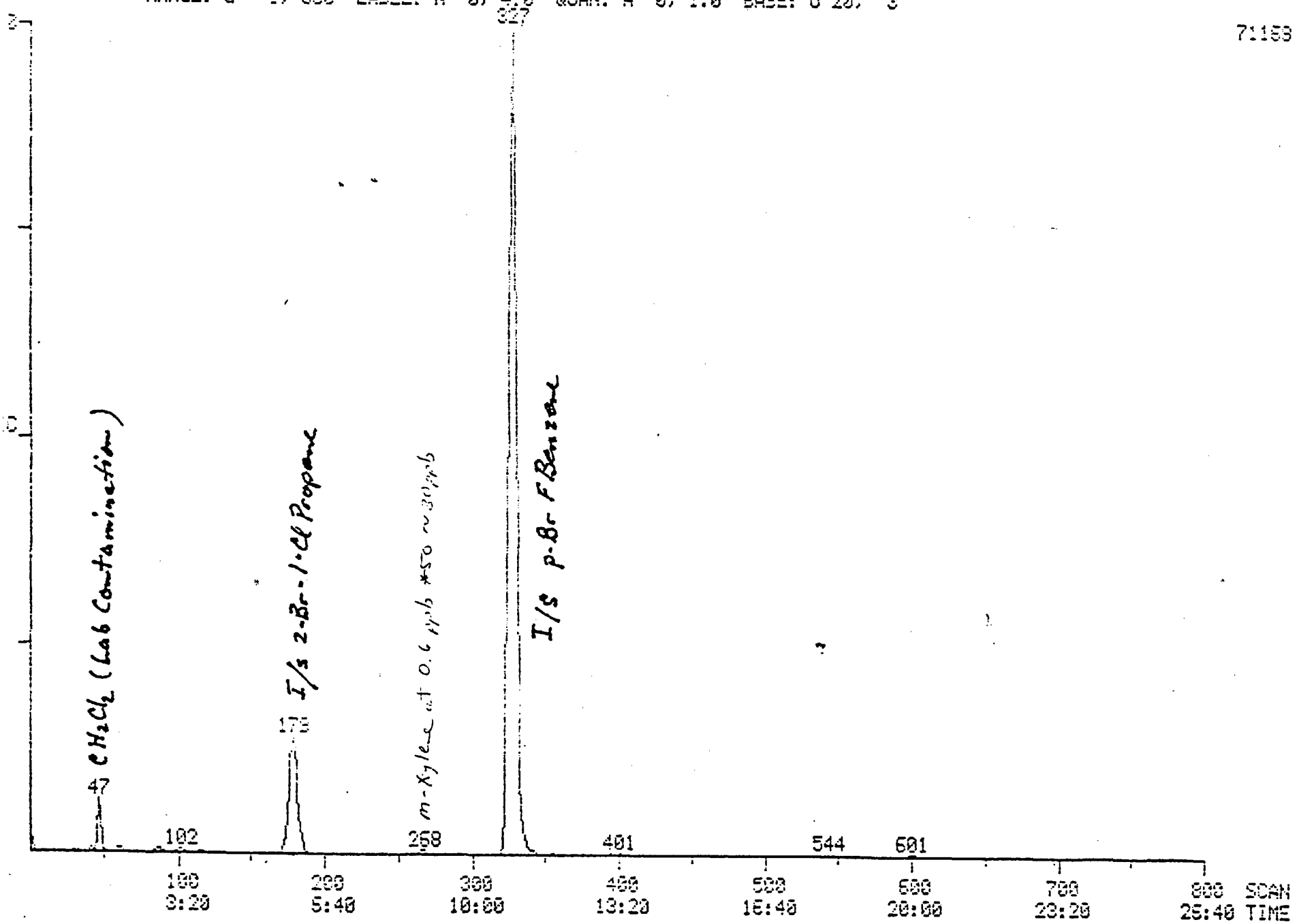
Date(s) of analysis: 3/25-6/85. Analyst's signature: K Meyerhoff

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: _____

RIC
03/25/85 14:38:00
SAMPLE: ORG-253 PIT#3 DUNCAN OIL FIELD 850318121SMZ 100:5000 DILUTION
RANGE: G 1, 800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3

DATA: ORG253 #287
CALI: C850325 #4

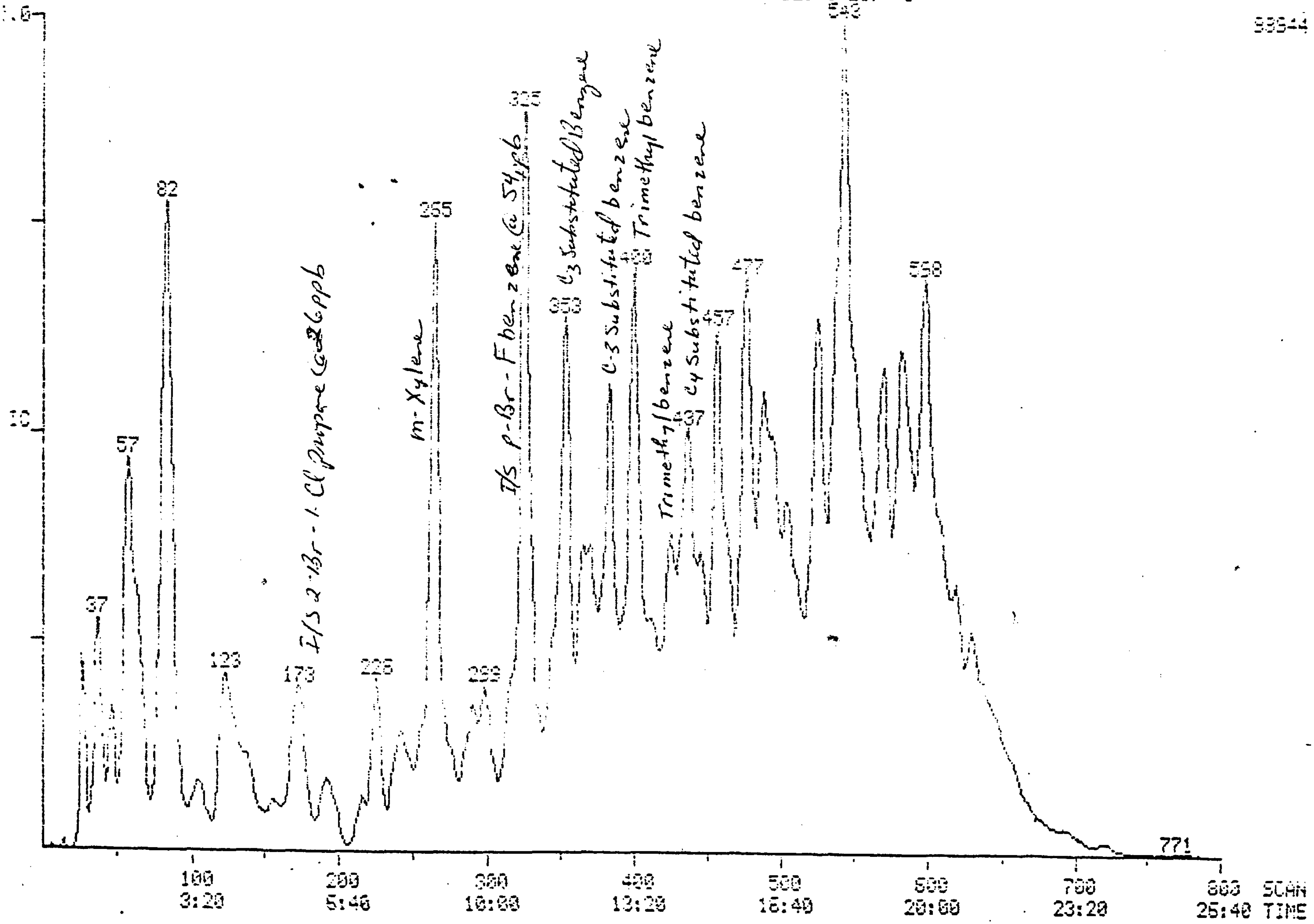
SCANS 1 TO 800



RIC
03/25/85 15:43:00
SAMPLE: ORG-253 PIT#3 DUNCAN OIL FIELD 8503181215MZ
RANGE: G 1, 800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3

DATA: ORG253 #1
CALI: C250325 #4

SCANS 1 TO 800



N. M. SCIENTIFIC LABORATORY DIVISION
QUANTITATION REPORT - FILE: ORG253

DATA: ORG253.TI
03/25/85 15:43:00
SAMPLE: ORG-253 PIT#3 DUNCAN OIL FIELD 8503181215MZ
SUBMITTED BY: EID ANALYST: RM

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	I/S (4-FLOUROBROMOBENZENE)
2	I/S (2-BROMO-1-CHLOROPROPANE)
3	BENZENE
4	1,2-DICHLOROETHANE
5	TOLUENE
6	1,2-DIBROMOETHANE
7	ETHYLBENZENE
8	P-XYLENE
9	M-XYLENE
10	O-XYLENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	174	325	10:50	1	1.000	A BB	97693.	54.210 UG/L	36.85
2	77	175	5:50	1	0.538	A BB	47707.	32.287 UG/L	21.95
3	NOT FOUND)								
4	NOT FOUND)								
5	NOT FOUND)								
6	NOT FOUND)								
7	91	239	7:58	1	0.735	A BB	3365.	0.901 UG/L	0.61
8	NOT FOUND)								
9	91	265	8:50	1	0.815	A BB	147865.	58.980 UG/L	40.09
10	91	284	9:28	1	0.874	A BB	1922.	0.743 UG/L	0.51

REPORT TO: Masud Zu Zaman
Division of Water Resources
P.O. Box 308 Window Rock
Navajo Nation (Arizona) 86515

LABORATORY 3/9/85

LAB NUMBER OR 254 A, B.

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water ☒ Soil ☐ Other

Water Supply and/or Code No.

City & County Window Rock, Ariz

Collected (date & time) 3/8/85 1.10 pm By (name) Zaman

pH=_____; Conductivity=_____umho/cm at_____°C; Chlorine Residual=_____

Dissolved Oxygen=_____mg/l; Alkalinity=_____; Flow Rate=_____

Sampling Location, Methods & Remarks (i.e. odors etc.)
Duncal Oil Field. Produced water pit

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed_____

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed_____

Method of Shipment to Laboratory_____

THIS FORM ACCOMPANIES 2 septum vials with teflon-lined discs identified as:
specimen_____; duplicate_____; triplicate_____; blank(s)_____,
and____ amber glass jug(s) with teflon-lined cap(s) identified as_____,
and____ other container(s) (describe)_____ identified as_____.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).
P-ICE: Sample stored in an ice bath.
P-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from_____ to
_____ at (location)_____ on
(date & time)_____ and that the statements in this block are correct.
Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .
Signature(s)_____ _____

I (we) certify that this sample was transferred from_____ to
_____ at (location)_____ on
(date & time)_____ and that the statements in this block are correct.
Disposition of Sample_____. Seal(s) Intact: Yes ☐ No ☐ .
Signature(s)_____ _____

ANALYSES REQUESTED

LAB. No.: ORG- 254

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN
		AROMATIC HYDROCARBON SCREEN
		HALOGENATED HYDROCARBON SCREEN
	X	GAS CHROMATOGRAPH/MASS SPECTROMETER
		SPECIFIC COMPOUNDS

QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBONS
		CHLORINATED HYDROCARBON PESTICIDES
		CHLOROPHENOXY ACID HERBICIDES
		HYDROCARBON FUEL SCREEN
		ORGANOPHOSPHATE PESTICIDES
		POLYCHLORINATED BIPHENYLS (PCB's)
		POLYNUCLEAR AROMATIC HYDROCARBONS
		TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
Benzene	less than 50 ug/l		
Toluene	180		
Ethylbenzene	106		
p-Xylene	80		
m-Xylene	390		
o-Xylene	150		
		* DETECTION LIMIT	50 ug/l

REMARKS: Some aliphatic compounds in the 6-8 carbon range at about the 10 ppb range.

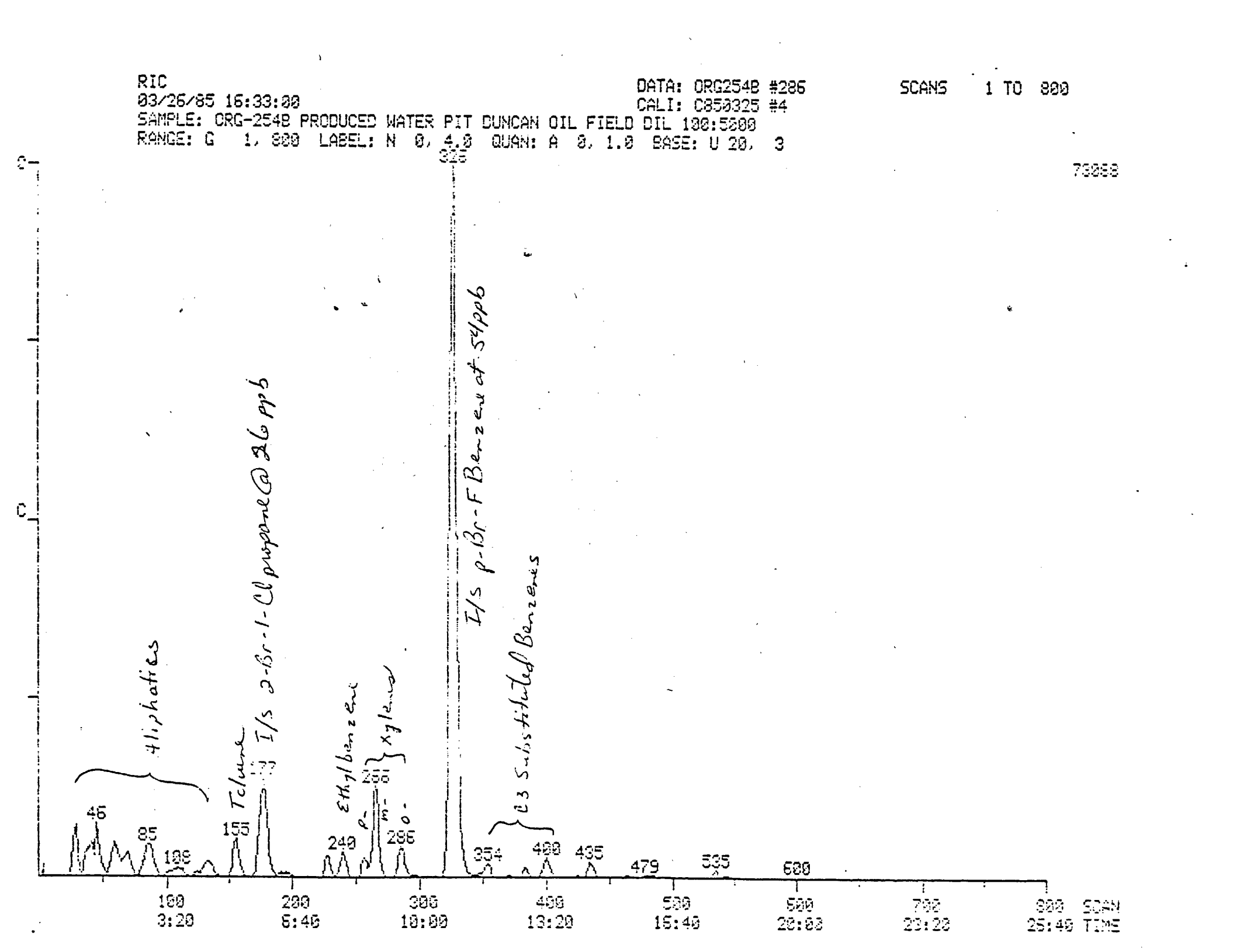
CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. Seal(s) broken by: _____ date: _____

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 3/25-6/85. Analyst's signature: R Meyerhoff

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: _____


RIC
03/26/85 16:33:00
DATA: ORG254B #286
CALI: C850325 #4
SCANS 1 TO 800
SAMPLE: ORG-254B PRODUCED WATER PIT DUNCAN OIL FIELD DIL 100:5000
RANGE: G 1, 800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3
Aliphatics
Toluene
I/S 2-Br-1-Cl propane @ 26 ppb
Ethylbenzene
Xylenes
I/S p-Br-F Benzene at 54 ppb
C3 Substituted Benzenes
100 3:20
200 6:40
300 10:00
400 13:20
500 15:40
600 20:00
700 23:20
800 25:40 SCAN TIME

QUANTITATION REPORT (FILE: DR0254B)

DATA: DR0254B.TI
03/26/85 16:33:00
SAMPLE: ORG-254B PRODUCED WATER PIT DUNCAN OIL FIELD DIL 100:5000
SUBMITTED BY: EID ANALYST: RM

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	I/S (4-FLOUROBROMOBENZENE)
2	I/S (2-BROMO-1-CHLOROPROPANE)
3	BENZENE
4	1,2-DICHLOROETHANE
5	TOLUENE
6	1,2-DIBROMOETHANE
7	ETHYLBENZENE
8	P-XYLENE
9	M-XYLENE
10	O-XYLENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT	* 50
1	174	326	10:52	1	1.000	A BB	100880.	54.210	UG/L	53.17	
2	77	177	5:54	1	0.543	A BB	44646.	29.260	UG/L	28.70	
3	NOT FOUND										
4	NOT FOUND										
5	91	155	5:10	1	0.475	A BB	12727.	3.712	UG/L	3.64	180
6	NOT FOUND										
7	91	240	8:00	1	0.736	A BB	8360.	2.170	UG/L	2.13	106
8	91	257	8:34	1	0.788	A BV	4146.	1.644	UG/L	1.61	80
9	91	266	8:52	1	0.816	A VB	20558.	7.941	UG/L	7.79	390
10	91	206	9:32	1	0.877	A BB	8063.	3.018	UG/L	2.96	150

85-0255 -C

REPORT TO:

Masud uz Zaman
Division of Water Resources
P.O. Box 308
Window Rock, Navajo Nation (AZ) 86515

LABORATORY 3/18/85

LAB NUMBER OP 255 A, B.

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water ☑ Soil ☐ Other

Water Supply and/or Code No.

City & County Window Rock, Ariz.

Collected (date & time) 3/18/85 11.45 hrs By (name) Zaman

pH=; Conductivity= umho/cm at °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

Sampling Location, Methods & Remarks (i.e. odors etc.)
Duncan Oil field (Pit #1.)

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory .

THIS FORM ACCOMPANIES 2 septum vials with teflon-lined discs identified as:
specimen; duplicate; triplicate; blank(s),
and amber glass jug(s) with teflon-lined cap(s) identified as,
and other container(s) (describe) identified as.
Containers are marked as follows to indicate preservation (circle):
NP: No preservation; sample stored at room temperature (~20°C).
P-ICE: Sample stored in an ice bath.
P-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from to
at (location) on
(date & time) and that the statements in this block are correct.
Disposition of Sample . Seal(s) Intact: Yes ☐ No ☐ .
Signature(s)

I (we) certify that this sample was transferred from to
at (location) on
(date & time) and that the statements in this block are correct.
Disposition of Sample . Seal(s) Intact: Yes ☐ No ☐ .
Signature(s)

ANALYSES REQUESTED

LAB. No.: ORG- 255

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN
	X	AROMATIC HYDROCARBON SCREEN
		HALOGENATED HYDROCARBON SCREEN
	X	GAS CHROMATOGRAPH/MASS SPECTROMETER
		SPECIFIC COMPOUNDS

QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBONS
		CHLORINATED HYDROCARBON PESTICIDES
		CHLOROPHENOXY ACID HERBICIDES
		HYDROCARBON FUEL SCREEN
		ORGANOPHOSPHATE PESTICIDES
		POLYCHLORINATED BIPHENYLS (PCB's)
		POLYNUCLEAR AROMATIC HYDROCARBONS
		TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
Aromatic purgeables	None Detected		
		* DETECTION LIMIT	50 ug/l

REMARKS: Some aliphatic purgeables were detected in the C10 to C20 carbon range at about 100 to 500 ppb level.

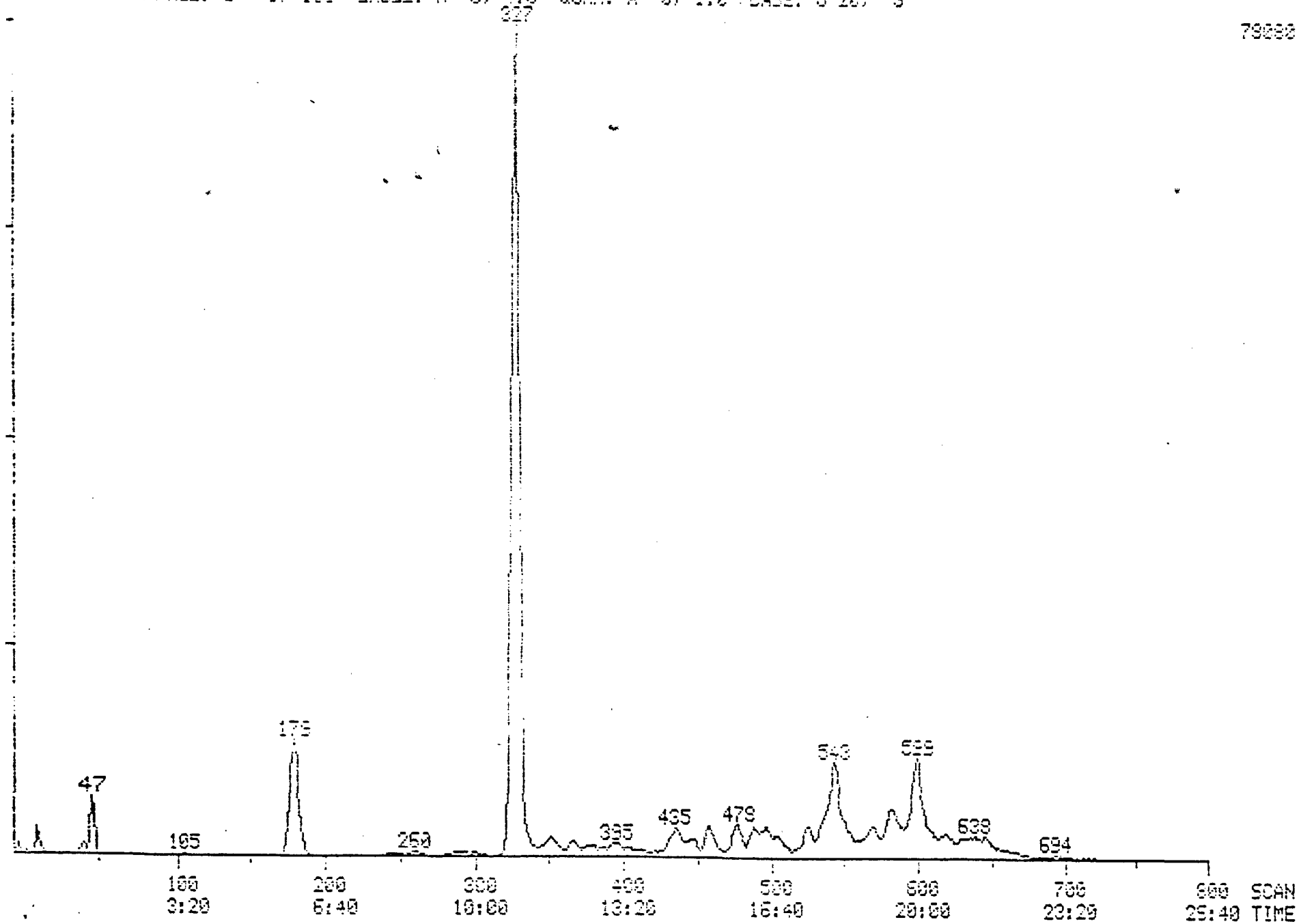
CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. Seal(s) broken by: _____ date: _____

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 3/25-6/85. Analyst's signature: K Meyerhoefer

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: K Meyerhoefer


RIC
03/26/85 13:38:00
DATA: ORG255B #287
CALI: C850325 #4
SCANS 1 TO 800
SAMPLE: ORG-255A PIT#1 DUNCAN OIL FIELD 850318114SM2 100:5000 DILUTION
RANGE: G 1, 800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3
327
79000
47
165
179
250
335
435
479
543
599
638
694
100
3:20
200
6:40
300
10:00
400
13:20
500
16:40
600
20:00
700
23:20
800
26:40
SCAN
TIME

N.M. SCIENTIFIC LABORATORY DIVISION
QUANTITATION REPORT FILE: ORG255B

DATA: ORG255B.TJ
03/26/85 13:38:00
SAMPLE: ORG-255A PIT#1 DUNCAN OIL FIELD 850318114SMZ 100:5000 DILUTION
SUBMITTED BY: JJD ANALYST: RM

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	I/S (4-FLOUROBROMOBENZENE)
2	I/S (2-BROMO-1-CHLOROPROPANE)
3	BENZENE
4	1,2-DICHLOROETHANE
5	TOLUENE
6	1,2-DIBROMOETHANE
7	ETHYLBENZENE
8	P-XYLENE
9	M-XYLENE
10	O-XYLENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	174	327	10:54	1	1.000	A BB	100236.	54.210 UG/L	63.74
2	77	179	5:58	1	0.547	A BB	46755.	30.839 UG/L	36.26
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								