



FIC LABORATORY DIVISION
700 Camino Salud NE, Albuquerque, New Mexico 87106
(505) 841-2500



ENTERED

REPORT TO: DAVID G. BOYER
NEW MEXICO OIL CONSERVATION DIV
P.O. BOX 2088
SANTA FE, NM 87501

S.L.D. No.: OR-658-A
DATE REC.: 7/03/85
PHONE 827-5812
USER CODE: 82235

CONTAINERS WHICH ACCOMPANY THIS FORM ARE COLLECTIVELY REFERED TO AS SAMPLE.

SUBMITTER: NM OIL CONSERVATION DIV
LOCATION: BLOOMFIELD REFINERY
SOURCE: FLARE SEEP
COLLECTED: 6/26/85 BY BOYER/BAILEY
SAMPLE TYPE: WATER SOIL OTHER
NEAREST CITY: BLOOMFIELD

Grid for township, range, section, tracts, aquifer, and depth information.

pH=; Conductivity=2260 umho/cm at 23 C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity=; Flow Rate=

Sampling Location, Methods and Remarks (i.e. odors, etc.)
COLLECTED ON BLUFF OVER SAN JUAN RIVER. SEEPING AT CONTACT OF ALLUVIUM & SILTY SANDSTONE BELOW FLARE, HYDROCARBON ODOOR

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

Method of shipment to the Laboratory: hand carried

This form accompanies 1 Septum Vials, Glass Jugs,

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

- NP: No preservation; sample stored at room temperature.
P-Ice: Sample stored in an ice bath (not frozen).
P-Na2S2O3: Sample preserved with Na2S2O3 to remove chlorine residual.

HAZARDOUS WASTE SECTION

AUG 2 0 1985

RECEIVED

I (we) certify that this sample was transferred from to at (location) on (date & time) and that the statements in this block are correct
Evidentiary Seals: Not Sealed Intact: Yes No
Signatures

(we) certify that this sample was transferred from to at (location) on (date & time) and that the statements in this block are correct
Evidentiary Seals: Not Sealed Intact: Yes No
Signatures



ANALYTICAL LABORATORY DIVISION

700 California Blvd NE, Albuquerque, New Mexico 87102
(505) 841-2500

REPORT TO: DAVID G. ROYER
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87501

S.L.D. No.: OR-651-17B
DATE REC.: 7/23/85
PHONE 827-5812
USER CODE: 82235

CONTAINERS WHICH ACCOMPANY THIS FORM ARE COLLECTIVELY REFERED TO AS SAMPLE.

SUBMITTER: NM O&E CODE
LOCATION: Bloomfield Refinery CODE
SOURCE: Hammer Ditch opposite flare CODE
COLLECTED: 6/26/85 BY Royce/Kiley CODE
SAMPLE TYPE: (WATER) SOIL OTHER CODE
NEAREST CITY: Bloomfield CODE

TOWNSHIP RANGE SECTION TRACTS											
AQUIFER						DEPTH					
8	5	0	6	2	4	1	5	3	0	1	1
Y	Y	H	M	D	D	H	H	M	H	I	I

pH= 8.3; Conductivity= 1100 umho/cm at 14 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

Sampling Location, Methods and Remarks (i.e. odors, etc.)
Grab sample from ditch - No odor or sheen ~~has~~ been in ditch

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

Method of shipment to the Laboratory Hand carried

This form accompanies 2 Septum Vials, Glass Jugs,

- Containers are marked as follows to indicate preservation (circle):
- NP: No preservation; sample stored at room temperature.
 - P-Ice: Sample stored in an ice bath (not frozen).
 - P-Na₂S₂O₃: Sample preserved with Na₂S₂O₃ to remove chlorine residual.

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

Evidentiary Seals: Not Sealed Intact: Yes No
Signatures

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

Evidentiary Seals: Not Sealed Intact: Yes No
Signatures



ANALYTICAL LABORATORY DIVISION
700 Camino de Salud NE, Albuquerque, New Mexico 87102
(505) 841-2500

SLD Priority II

REPORT TO: DAVID G. ROYER
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87501

S.L.D. No: OR-646-F.B
DATE REC.: 7/15/85
PHONE 827-5812
USER CODE: 82235

CONTAINERS WHICH ACCOMPANY THIS FORM ARE COLLECTIVELY REFERED TO AS SAMPLE.

SUBMITTER: NM OCTs CODE
LOCATION: Bloomfield Refinery CODE
SOURCE: N side Sullivan Arroyo, Sample CODE
Hole #1 CODE
COLLECTED: 6/26/85 BY Boyer/Railey CODE
SAMPLE TYPE: (WATER) SOIL OTHER CODE
NEAREST CITY: Bloomfield CODE

TOWNSHIP RANGE SECTION TRACTS
AQUIFER DEPTH
8506261728A178
Y V M M D D H H M M I I I

pH= _____; Conductivity= _____ umho/cm at _____ °C; Chlorine Residual= _____
Dissolved Oxygen= _____ mg/l; Alkalinity= _____; Flow Rate= _____

Sampling Location, Methods and Remarks (i.e. odors, etc.)
Sample from dug hole west of Hammond ditto - Hole 18-24" deep. Sand black and oily. Strong Hydrocarbon smell. Water 6-8" down

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

Method of shipment to the Laboratory Hand carried

This form accompanies 2 Septum Vials, _____ Glass Jugs, _____

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

- NP: No preservation; sample stored at room temperature.
- P-Ice: Sample stored in an ice bath (not frozen).
- P-Na₂S₂O₃: Sample preserved with Na₂S₂O₃ to remove chlorine residual.

I (we) certify that this sample was transferred from _____ to _____ at (location) _____ on (date & time) _____ and that the statements in this block are correct
Evidentiary Seals: Not Sealed Intact: Yes No
Signatures _____

(we) certify that this sample was transferred from _____ to _____ at (location) _____ on (date & time) _____ and that the statements in this block are correct
Evidentiary Seals: Not Sealed Intact: Yes No
Signatures _____



ANALYTICAL LABORATORY DIVISION
700 Camino de Salud NE, Albuquerque, New Mexico 87110
(505) 841-2500

SLD Priority II
S.L.D. No. SR-645-17B

REPORT TO: DAVID G. BOYER
NEW MEXICO OIL CONSERVATION DIV
P.O. BOX 2088
SANTA FE, NM 87501

DATE REC. : 7/05/85
PHONE 827-5812
USER CODE: 82235

CONTAINERS WHICH ACCOMPANY THIS FORM ARE COLLECTIVELY REFERED TO AS SAMPLE.

SUBMITTER: NM OCS CODE
LOCATION: Bloomfield Refinery CODE
SOURCE: South Side Sullivan Arroyo, Samples Hole #2, near pipeline CODE
COLLECTED: 6/26/85 BY Boyer/Bailey CODE
SAMPLE TYPE: (WATER) SOIL OTHER CODE
NEAREST CITY: Bloomfield CODE

TOWNSHIP RANGE SECTION TRACTS
AQUIFER DEPTH
0506261740
Y Y M M D D H H M M I I T T

pH= _____; Conductivity= _____ umho/cm at _____ °C; Chlorine Residual= _____
Dissolved Oxygen= _____ mg/l; Alkalinity= _____; Flow Rate= _____

Sampling Location, Methods and Remarks (i.e. odors etc.)
S. Side Sullivan Arroyo immediately downstream of N.G. pipeline. Water at surface. Hole 12-15" deep, black and oily sand. Sample from filled up hole.

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

Method of shipment to the Laboratory _____

This form accompanies 2 Septum Vials, _____ Glass Jugs, _____

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

- NP: No preservation; sample stored at room temperature.
- P-Ice Sample stored in an ice bath (not frozen).
- P-Na₂S₂O₃: Sample preserved with Na₂S₂O₃ to remove chlorine residual.

I (we) certify that this sample was transferred from _____ to _____ at (location) _____ on (date & time) _____ and that the statements in this block are correct
Evidentiary Seals: Not Sealed Intact: Yes No
Signatures _____

(we) certify that this sample was transferred from _____ to _____ at (location) _____ on (date & time) _____ and that the statements in this block are correct
Evidentiary Seals: Not Sealed Intact: Yes No
Signatures _____



ANALYTICAL LABORATORY DIVISION
700 Camino de Salud NE, Albuquerque, New Mexico 87106
(505) 841-2500

S.L.D. Priority #

REPORT TO: DAVID G. ROYER
NEW MEXICO OIL CONSERVATION DIV
P.O. BOX 2088
SANTA FE, NM 87501

S.L.D. NO.: OR- 644-A
DATE REC.: 7/15/75
PHONE 827-5812
USER CODE: 82235

CONTAINERS WHICH ACCOMPANY THIS FORM ARE COLLECTIVELY REFERED TO AS SAMPLE.

SUBMITTER: NM O&G CODE
LOCATION: Bloomfield Refinery CODE
SOURCE: S. Side Sullivan Arroyo, ~~Arroyo~~ TOWNSHIP RANGE SECTION TRACTS
Sample Hole #3 CODE
COLLECTED: 6/26/75 BY Royce Bailey CODE
SAMPLE TYPE: WATER SOIL OTHER CODE
NEAREST CITY: Bloomfield CODE
AQUIFER DEPTH 0506261750A78
Y Y M M D D H H M M I I P

pH= _____; Conductivity= _____ umho/cm at _____ °C; Chlorine Residual= _____
Dissolved Oxygen= _____ mg/l; Alkalinity= _____; Flow Rate= _____

Sampling Location, Methods and Remarks (i.e. odors, etc.)
Arroyo S. Side Sullivan Road at Hwy 44 Culvert. Dig
Hole 12-15" deep saw black and oily, strongly hydrocarbonated,
water at surface, sample from filled hole

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

Method of shipment to the Laboratory Hand Carried

This form accompanies 1 Septum Vials, Glass Jugs, _____

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

- NP: No preservation; sample stored at room temperature.
- P-Ice: Sample stored in an ice bath (not frozen).
- P-Na₂S₂O₃: Sample preserved with Na₂S₂O₃ to remove chlorine residual.

I (we) certify that this sample was transferred from _____
to _____ at (location) _____ on
(date & time) _____ and that the statements in this block are correct
Evidentiary Seals: Not Sealed Intact: Yes No
Signatures _____

(we) certify that this sample was transferred from _____
to _____ at (location) _____ on
(date & time) _____ and that the statements in this block are correct
Evidentiary Seals: Not Sealed Intact: Yes No
Signatures _____

DATE RECEIVED: 5/15/85 LAB NO. 200-1915 USER CODE: 59300 59600 OTHER: 82235

Collection DATE: 5/15/85 SITE INFORMATION: Bloomfield Ref - Hammond Ditch @ ART

Collection TIME: 7:50

Collected by — Person/Agency: Boyer/OKS

Collection site description: Ditch opposite ART separator, sample from beside pump back into

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

Attn: David Boyer

SEND FINAL REPORT TO

Station/well code

Owner

Bloomfield Ref.

SAMPLING CONDITIONS

Bailed Pump Water level Discharge Sample type

Dipped Tap Conductivity (Uncorrected) 3450 μ mho Water Temp. (00010) 15 $^{\circ}$ C Conductivity at 25 $^{\circ}$ C (00094) μ mho

pH (00400) —

Field comments: Ditch flushed for several hundred yards either side of ART separator as a

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted: 1

NF: Whole sample (Non-filtered) F: Filtered in field with 0.45 μ m membrane filter A: 2 ml H₂SO₄/L added

NA: No acid added Other-specify:

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	NA, NF	Units	Date analyzed
<input checked="" type="checkbox"/> Conductivity (Corrected) 25 $^{\circ}$ C (00095)	3699 μ mho	9/9	<input checked="" type="checkbox"/> Calcium (00915)	216 mg/l	4/15
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)			<input checked="" type="checkbox"/> Magnesium (00925)	64.3 mg/l	4/15 16.09
<input checked="" type="checkbox"/> Other: pH	5.58	5/3	<input checked="" type="checkbox"/> Sodium (00930)	630 mg/l	3/28
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Potassium (00935)	7.80 mg/l	3/28
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Bicarbonate (00440)	405.0 mg/l	5/7
<input checked="" type="checkbox"/> Nitrate-N +, Nitrate-N total (00630)			<input checked="" type="checkbox"/> Chloride (00940)	366.4 mg/l	4/15
<input type="checkbox"/> Ammonia-N total (00610)			<input checked="" type="checkbox"/> Sulfate (00945)	742.6 mg/l	4/4
<input type="checkbox"/> Total Kjeldahl-N ()			<input checked="" type="checkbox"/> Total filterable residue (dissolved) (70300)	2713 mg/l	5/10
<input type="checkbox"/> Chemical oxygen demand (00340)			<input checked="" type="checkbox"/> Other: CO ₃	10710	5/7
<input checked="" type="checkbox"/> Total organic carbon ()	27.5 mg/l	7/11	<input checked="" type="checkbox"/> Fluoride	0.41	4/8
<input type="checkbox"/> Other:			F, A-H ₂ SO ₄		
<input type="checkbox"/> Other:			<input type="checkbox"/> Nitrate-N +, Nitrate-N dissolved (00631)		
			<input type="checkbox"/> Ammonia-N dissolved (00608)		
			<input type="checkbox"/> Total Kjeldahl-N ()		
			<input type="checkbox"/> Other:		
			Analyst	Date Reported	Reviewed by
				7/29/85	Deur



New Mexico Health and Environment Department
 SCIENTIFIC LABORATORY DIV
 700 Camino de Salud NE
 Albuquerque, NM 87106 — (505) 841-2555

**GENERAL WATER CHEMISTRY
 and NITROGEN ANALYSIS**

DATE RECEIVED	LAB NO.	USER CODE	OTHER
3/12/85	110-1715	59300 <input type="checkbox"/> 59600 <input type="checkbox"/> <input checked="" type="checkbox"/> OTHER: 82235	
Collection DATE	SITE INFORMATION	Sample location	
3/12/85		Bloomfield Ref. Mon Well # 4	
Collection TIME		Collection site description	
1137		Sample from well on property boundary, dry next to main entrance of office building, all reservoirs	
Collected by -- Person/Agency			
Boyer/OCU			

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

Attn: David Boyer

SAMPLING CONDITIONS

<input checked="" type="checkbox"/> Bailed <input type="checkbox"/> Dipped	<input type="checkbox"/> Pump <input type="checkbox"/> Tap	Water level	Discharge	Sample type
		3/18 NAH 6.2251	—	Local
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	Conductivity at 25°C (00094)	
—	27.50 µmho	20 °C	— µmho	
Field comments				
First bail pure product (API gravity 61.9) Railed well & casing volumes before sample				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	<input checked="" type="checkbox"/> NF: Whole sample (Non-filtered)	<input type="checkbox"/> F: Filtered in field with 0.45 µm membrane filter	<input type="checkbox"/> A: 2 ml H ₂ SO ₄ /L added
1			
<input checked="" type="checkbox"/> NA: No acid added <input type="checkbox"/> Other-specify:			

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	NA NF	Units	Date analyzed
<input checked="" type="checkbox"/> Conductivity (Corrected) 25°C (00095)	µmho	5/9	<input checked="" type="checkbox"/> Calcium (00915)	mg/l	4/15
2483			<input checked="" type="checkbox"/> Magnesium (00925)	mg/l	4/15-9.95
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	mg/l		<input checked="" type="checkbox"/> Sodium (00930)	mg/l	3/28
			<input checked="" type="checkbox"/> Potassium (00935)	mg/l	3/28
<input checked="" type="checkbox"/> Other: pH		5/3	<input checked="" type="checkbox"/> Bicarbonate (00440)	mg/l	5/7
7.77			<input checked="" type="checkbox"/> Chloride (00940)	mg/l	4/15
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Sulfate (00945)	mg/l	4/4
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Total filterable residue (dissolved) (70300)	mg/l	5/3
			<input checked="" type="checkbox"/> Other: CO ₃ Fluoride	mg/l	3/7
			0.22		4/8
<input type="checkbox"/> Nitrate-N +, Nitrate-N total (00630)	mg/l		F, A-H ₂ SO ₄		
<input type="checkbox"/> Ammonia-N total (00610)	mg/l		<input type="checkbox"/> Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
<input type="checkbox"/> Total Kjeldahl-N ()	mg/l		<input type="checkbox"/> Ammonia-N dissolved (00608)	mg/l	
<input type="checkbox"/> Chemical oxygen demand (00340)	mg/l		<input type="checkbox"/> Total Kjeldahl-N ()	mg/l	
<input checked="" type="checkbox"/> Total organic carbon ()	mg/l	6/13	<input type="checkbox"/> Other:		
15.7					
<input type="checkbox"/> Other:			Analyst	Date Reported	Reviewed by
<input type="checkbox"/> Other:				7/20/85	C. Jean

Laboratory remarks