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151

REPORTS

DATE:

NOV 1996



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November 8, 1996

Mr. Bill Olson
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

Dear Mr. Olson:

In accordance with your recent request, please find enclosed the analytical results and quality assurance /quality control data for third calendar quarter' sampling of the monitoring wells at the El Paso Field Services Blanco Field Office. As previously reported, these samples were collect during August 1996.

For your convenience, I will include this information with all future monitoring well reports. If you need any additional information, please call me at (505) 599-2256.

Sincerely yours,

A handwritten signature in cursive script that reads 'David Bays'.

David Bays
Sr. Environmental Scientist

cc: Mr. Denny Foust - NMOCD - Aztec, NM
S. D. Miller/Blanco Field Office Groundwater Project File

August 15, 1996

ANALYTICAL

August 1996 Quarterly REPORT

File:

Blanco Field

**Quarterly Monitor Well Results
Lab Sample #'s 960676 to 960682
Sampled August 5, 1996
Sampled by D. Bird**

REMARKS:

These are the Third Quarter 1996 results for the monitor wells at Blanco Field. Monitor well #4 continues to exceed New Mexico OCD limits for Benzene.

Report Distribution:

Nancy Prince
SDM/JDB
Results Log Book
File

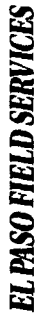


Natural Gas Company

A 2602

CHAIN OF CUSTODY RECORD

[illegible]



Well Development and Purging Data

Well Number MS-1

Site Name OLD BLANCO FIELD YARD

Meter Code

Development Criteria

- ☒
- 3 to 5 Casing Volumes of Water Removal
-
- ☐
- Stabilization of Indicator Parameters
-
- ☐
- Other

Water Volume Calculation

Initial Depth of Well (feet) 10.6
Initial Depth to Water (feet) 5.56
Height of Water Column in Well (feet) 5.04

Diameter (inches): Well 2 Gravel Pack _____

Methods of Development

- | | | |
|--------------------------|-------------|---|
| ☐ | Pump | Bailer |
| ☐ | Centrifugal | ☒ Bottom Valve |
| ☐ | Submersible | ☐ Double Check Valve |
| ☐ | Peristaltic | ☐ Stainless-steel Kemmerer |

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other 0.0.C

Water Disposal

KUT2 SEPAPTOR

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		1.88	7.6
Gravel Pack			
Drilling Fluids			
Total			

Water Removal Data

[illegible]

Comments

Developer's Signature Dennis Bird

Date 8-5-96

Reviewer

2

Date:

76/51/8

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960676
SITE NAME:	Old Blanco Field Yard
SAMPLE SITE:	MW-1
METER CODE:	n/a
SAMPLE DATE:	08/05/96
SAMPLE TIME (Hrs):	1010
SAMPLED BY:	D. Bird
DATE OF BTEX ANALYSIS:	08/06/96
SAMPLE TYPE:	Water

REMARKS: _____

EPA Method 8020 (BTEX) RESULTS

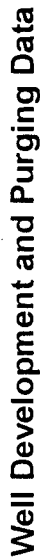
PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	<1		10
TOLUENE	<1		740
ETHYL BENZENE	<1		750
TOTAL XYLENES	<3		620
SURROGATE % RECOVERY	98.4	Allowed Range 80 to 120 %	

NOTES:

Reported By: nde

Approved By: John Smith

Date: 8/15/96



Well Number M4-2

Site Name *OLD BLANCO FIELD YARD*

Development Criteria

- ☒
- 3 to 5 Casing Volumes of Water Removal
-
- ☐
- Stabilization of Indicator Parameters
-
- ☐
- Other

Methods of Development

- | | | | |
|-------------|--------------------------|--------------------------|-------------------------------------|
| Pump | ☐ | Bailer | ☐ |
| Centrifugal | ☐ | Bottom Valve | ☒ |
| Submersible | ☐ | Double Check Valve | ☐ |
| Peristaltic | ☐ | Stainless-steel Kemmerer | ☐ |

☐ Other _____

Water Volume Calculation,

Initial Depth of Well (feet) 20.4
Initial Depth to Water (feet) 2.51
Height of Water Column in Well (feet) 12.89
Diameter (inches): Well 4 Gravel Pack

4 Diameter (inches): Well Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		8.5	25.6
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other 0.0.C

Water Disposal
KUTZ SEPARATOR

Water Removal Data

[illegible]

Comments

Developer's Signature Dennis Biesch Date 8-5-96 Reviewer J.F. Date 8/5/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960677
SITE NAME:	Old Blanco Field Yard
SAMPLE SITE:	MW-2
METER CODE:	n/a
SAMPLE DATE:	08/05/96
SAMPLE TIME (Hrs):	1148
SAMPLED BY:	D. Bird
DATE OF BTEX ANALYSIS:	08/06/96
SAMPLE TYPE:	Water

REMARKS: _____

EPA Method 8020 (BTEX) RESULTS

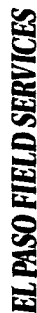
PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	<1		10
TOLUENE	<1		740
ETHYL BENZENE	<1		750
TOTAL XYLENES	<3		620
SURROGATE % RECOVERY	99.1	Allowed Range 80 to 120 %	

NOTES:

Reported By: mda

Approved By: John Larch

Date: 8/15/96



Well Number MW-3

Site Name *Old Blanco Field Yard*

Meter Code

Development Criteria

- ☒
- 3 to 5 Casing Volumes of Water Removal
-
- ☐
- Stabilization of Indicator Parameters
-
- ☐
- Other

Water Volume Calculation

Initial Depth of Well (feet) 11.9
Initial Depth to Water (feet) 8.00
Height of Water Column in Well (feet) 3.9

Diameter (inches): Well 2 Gravel Pack

Methods of Development

- | Pump | Bailer | Bottom Valve | Double Check Valve | Kemmerer |
|--------------------------------------|-------------------------------------|--------------|--------------------|----------|
| ☐ Centrifugal | ☒ | | | |
| ☐ Submersible | | | | |
| ☐ Peristaltic | | | | |

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O.C.

Water Disposal

KOTZ SEPARATOR

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		.68	2.0
Gravel Pack			
Drilling Fluids			
Total			

Other

Water Removal Data

[illegible]

Comments
BAILED DRY @ 1.0 GALLON.

Developer's Signature Jennie Bird

Date 8-5-96

Reviewer

2

Date _____

76/51/8

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960678
SITE NAME:	Old Blanco Field Yard
SAMPLE SITE:	MW-3
METER CODE:	n/a
SAMPLE DATE:	08/05/96
SAMPLE TIME (Hrs):	1205
SAMPLED BY:	D. Bird
DATE OF BTEX ANALYSIS:	08/06/96
SAMPLE TYPE:	Water

REMARKS:

EPA Method 8020 (BTEX) RESULTS

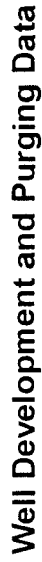
PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	<1		10
TOLUENE	<1		740
ETHYL BENZENE	10.0		750
TOTAL XYLENES	3.47		620
SURROGATE % RECOVERY	101	Allowed Range 80 to 120 %	

NOTES:

Reported By: mda

Approved By: John Larch

Date: 8/15/96



☐	Development
☒	Purging

Development Criteria

Water Volume Calculation

Initial Depth of Well (feet) 10.3
Initial Depth to Water (feet) 6.10
Height of Water Column in Well (feet) 4.20

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

Instruments

☒	pH Meter
☐	DO Monitor
☒	Conductivity Meter
☒	Temperature Meter
☒	Other <u>0.0.0</u>

Water Disposal
KUTZ SEPARATOR

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		.73	7.2
Gravel Pack			
Drilling Fluids			
Total			

[illegible]

Developer's Signature Dennis Bied

Date 8-5-96 Reviewer g f

Date 8/16/94

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960679
SITE NAME:	Old Blanco Field Yard
SAMPLE SITE:	MW-4
METER CODE:	n/a
SAMPLE DATE:	08/05/96
SAMPLE TIME (Hrs):	1242
SAMPLED BY:	D. Bird
DATE OF BTEX ANALYSIS:	08/06/96
SAMPLE TYPE:	Water

REMARKS: _____

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	17.9		10
TOLUENE	1.44		740
ETHYL BENZENE	28.2		750
TOTAL XYLENES	52.2		620
SURROGATE % RECOVERY	99.0	Allowed Range 80 to 120 %	

NOTES:

Reported By: mdw

Approved By: John Smith

Date: 8/15/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960680
SITE NAME:	Old Blanco Field Yard
SAMPLE SITE:	MW-4
METER CODE:	n/a
SAMPLE DATE:	08/05/96
SAMPLE TIME (Hrs):	1242
SAMPLED BY:	D. Bird
DATE OF BTEX ANALYSIS:	08/06/96
SAMPLE TYPE:	Water

REMARKS: Field Duplicate

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	35.8		10
TOLUENE	3.18		740
ETHYL BENZENE	54.5		750
TOTAL XYLENES	102		620
SURROGATE % RECOVERY	97.5	Allowed Range 80 to 120 %	

NOTES:

Reported By: mda

Approved By: John Ladd

Date: 8/15/96



Well Development and Purging Data

Well Number MW-5

Site Name do BLANCO FIELD FARD

Meter Code

Development Criteria

- ☒
- 3 to 5 Casing Volumes of Water Removal
-
- ☐
- Stabilization of Indicator Parameters
-
- ☐
- Other _____

Methods of Development

- | Pump | Bailer |
|--------------------------------------|---|
| ☐ Centrifugal | ☒ Bottom Valve |
| ☐ Submersible | ☐ Double Check Valve |
| ☐ Peristaltic | ☐ Stainless-steel Kemmerer |

Water Volume Calculation

Initial Depth of Well (feet) 198

Initial Depth to Water (feet) 9.34 1.25

Height of Water Column in Well (feet) 10.46

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.9	20.7
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other 0.0.0.

Water Disposal

KUTZ SEPARATOR

Water Removal Data

[illegible]

Comments

Developer's Signature Dennis Bird

Date 8-5-96

Reviewer

Date 5/16/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960681
SITE NAME:	Old Blanco Field Yard
SAMPLE SITE:	MW-5
METER CODE:	n/a
SAMPLE DATE:	08/05/96
SAMPLE TIME (Hrs):	1353
SAMPLED BY:	D. Bird
DATE OF BTEX ANALYSIS:	08/06/96
SAMPLE TYPE:	Water

REMARKS: _____

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	<1		10
TOLUENE	<1		740
ETHYL BENZENE	<1		750
TOTAL XYLENES	<3		620
SURROGATE % RECOVERY	96.9	Allowed Range 80 to 120 %	

NOTES:

Reported By: mda

Approved By: John Larch

Date: 8/15/96



Well Number W-6

Meter Code

Site Name OLD BLANCO FIELD YARD

Development Criteria

- | | |
|-------------------------------------|--|
| ☒ | 3 to 5 Casing Volumes of Water Removal |
| ☐ | Stabilization of Indicator Parameters |
| ☐ | Other |

Methods of Development

- | | | | |
|--------------------------|--------------------|-------------------------------------|---------------------------------|
| ☐ | Pump | ☐ | Bailer |
| ☐ | Centrifugal | ☒ | Bottom Valve |
| ☐ | Submersible | ☐ | Double Check Valve |
| ☐ | Peristaltic | ☐ | Stainless-steel Kemmerer |

Water Volume Calculation

Initial Depth of Well (feet) 20.1
Initial Depth to Water (feet) 9.30
Height of Water Column in Well (feet) 10.8

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.1	21.4
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other 20.0

Water Disposal

KUTZ SEPARATOR

Water Removal Data

[illegible]

Comments

Developer's Signature Dennis Birch

Date 8-5-96

Reviewer

21

Date 8/16/10

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960682
SITE NAME:	Old Blanco Field Yard
SAMPLE SITE:	MW-6
METER CODE:	n/a
SAMPLE DATE:	08/05/96
SAMPLE TIME (Hrs):	1438
SAMPLED BY:	D. Bird
DATE OF BTEX ANALYSIS:	08/06/96
SAMPLE TYPE:	Water

REMARKS:

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	<1		10
TOLUENE	<1		740
ETHYL BENZENE	<1		750
TOTAL XYLENES	<3		620
SURROGATE % RECOVERY	93.8	Allowed Range 80 to 120 %	

NOTES:

Reported By: mdw

Approved By: John Tade

Date: 8/15/96

EPFS

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT EPA METHOD 8020 - BTEX

Samples: 960676 thru 960682

QA/QC for 08/06/96 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER ICV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	46.9	94	75 - 125 %	X
Toluene	Standard	50.0	47.1	94	75 - 125 %	X
Ethylbenzene	Standard	50.0	47.1	94	75 - 125 %	X
m & p - Xylene	Standard	100	95.1	95	75 - 125 %	X
o - Xylene	Standard	50.0	47.3	95	75 - 125 %	X
SAMPLE NUMBER LCS LA-45476 25 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	25.0	22.9	91.6	39 - 150	X
Toluene	Standard	25.0	23.3	93.2	46 - 148	X
Ethylbenzene	Standard	25.0	23.6	94.4	32 - 160	X
m & p - Xylene	Standard	50.0	47.8	95.6	Not Given	X
o - Xylene	Standard	25.0	23.8	95.2	Not Given	X
SAMPLE NUMBER CCV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	48.4	96.8	75 - 125 %	X
Toluene	Standard	50.0	48.6	97.2	75 - 125 %	X
Ethylbenzene	Standard	50.0	48.5	97.0	75 - 125 %	X
m & p - Xylene	Standard	100	96.6	96.6	75 - 125 %	X
o - Xylene	Standard	50.0	48.6	97.2	75 - 125 %	X
SAMPLE NUMBER CCV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	46.3	92.6	75 - 125 %	X
Toluene	Standard	50.0	46.3	92.6	75 - 125 %	X
Ethylbenzene	Standard	50.0	46.1	92.2	75 - 125 %	X
m & p - Xylene	Standard	100	91.9	91.9	75 - 125 %	X
o - Xylene	Standard	50.0	46.4	92.8	75 - 125 %	X

Narrative: Acceptable.

EL PASO FIELD SERVICES LAB
QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX
Samples: 960676 thru 960682

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
960680					RANGE	
Benzene	Matrix Duplicate	35.8	35.2	1.69	+/- 20 %	X
Toluene	Matrix Duplicate	3.18	3.17	0.31	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	54.5	54.9	0.73	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	102	101	0.99	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
2nd Analysis 960680					RANGE	
Benzene	50	35.8	81.7	91.8	75 - 125 %	X
Toluene	50	3.18	52.2	98.0	75 - 125 %	X
Ethylbenzene	50	54.5	101	93.0	75 - 125 %	X
m & p - Xylene	100	102	196	94.0	75 - 125 %	X
o - Xylene	50	<1	49.9	99.8	75 - 125 %	X

Narrative: Acceptable.

ADDITIONAL ANALYTICAL BLANKS:

AUTO BLANK	SOURCE	PPB	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE	PPB	STATUS
	Lot MB1461	(Analyzed with this set)	
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB	STATUS
		(None analyzed with this set)	
Benzene	Vial + Boiled Water	<1.0	N/A
Toluene	Vial + Boiled Water	<1.0	N/A
Ethylbenzene	Vial + Boiled Water	<1.0	N/A
Total Xylenes	Vial + Boiled Water	<3.0	N/A

Narrative: Acceptable.

Reported By: mdw

Approved By: Jole Faith

Date: 8/15/96