

Report to:

Denise Casaus



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Morningstar Operating LLC.

Project Name: Navajo Indian #6E

Work Order: E406110

Job Number: 20100-0001

Received: 6/11/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/19/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
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Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 6/19/24

Denise Casaus  
811 S. Main Ave.  
Aztec, NM 87410



Project Name: Navajo Indian #6E  
Workorder: E406110  
Date Received: 6/11/2024 1:47:00PM

Denise Casaus,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/11/2024 1:47:00PM, under the Project Name: Navajo Indian #6E.

The analytical test results summarized in this report with the Project Name: Navajo Indian #6E apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

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Sample Summary

Morningstar Operating LLC.	Project Name:	Navajo Indian #6E	Reported:
811 S. Main Ave.	Project Number:	20100-0001	
Aztec NM, 87410	Project Manager:	Denise Casaus	06/19/24 15:42

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Navajo Indian #6E	E406110-01A	Aqueous	06/11/24	06/11/24	Poly, 1000mL



## Sample Data

Morningstar Operating LLC.  
811 S. Main Ave.  
Aztec NM, 87410

Project Name: Navajo Indian #6E  
Project Number: 20100-0001  
Project Manager: Denise Casaus

**Reported:**  
6/19/2024 3:42:40PM

### Navajo Indian #6E

E406110-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Wet Chem/Gravimetric by SM2540C</b>	mg/L	mg/L		Analyst: JL		Batch: 2424110
Total Dissolved Solids	<b>1290</b>	10.0	1	06/14/24	06/19/24	
<b>Wet Chemistry by 9040C/4500H+B</b>	pH Units	pH Units		Analyst: WF		Batch: 2424100
pH @25°C	<b>11.8</b>		1	06/14/24 08:33	06/14/24 11:53	H5
<b>Wet Chemistry by SM2320B</b>	mg/L	mg/L		Analyst: KH		Batch: 2425034
Total Alkalinity (as CaCO <sub>3</sub> at pH 4.5)	<b>850</b>	10.0	1	06/18/24	06/18/24	
<b>Wet Chemistry by 9050A/2510B</b>	uS/cm	uS/cm		Analyst: BA		Batch: 2425012
Specific Conductance (@ 25 C)	<b>2780</b>	10.0	1	06/17/24	06/17/24	
<b>Dissolved Metals by EPA 6010C</b>	mg/L	mg/L		Analyst: JL		Batch: 2425001
Calcium	<b>3.29</b>	1.00	1	06/17/24	06/19/24	
Iron	ND	2.00	1	06/17/24	06/19/24	
Magnesium	ND	1.00	1	06/17/24	06/19/24	
Potassium	<b>1.01</b>	1.00	1	06/17/24	06/19/24	
Sodium	<b>603</b>	20.0	10	06/17/24	06/19/24	C1
Sodium Absorption Ratio (CALC)	<b>91.6</b>		1	06/19/24	06/19/24	
<b>Anions by EPA 300.0/9056A</b>	mg/L	mg/L		Analyst: DT		Batch: 2424074
Fluoride	<b>1.48</b>	1.25	5	06/12/24	06/12/24	
Chloride	ND	10.0	5	06/12/24	06/12/24	
Nitrite-N	ND	1.25	5	06/12/24 13:19	06/12/24 23:13	
Nitrate-N	ND	1.25	5	06/12/24 13:19	06/12/24 23:13	
o-Phosphate-P	ND	1.25	5	06/12/24 13:19	06/12/24 23:13	
Sulfate	<b>88.0</b>	10.0	5	06/12/24	06/12/24	



QC Summary Data

Morningstar Operating LLC. 811 S. Main Ave. Aztec NM, 87410	Project Name: Navajo Indian #6E Project Number: 20100-0001 Project Manager: Denise Casaus	Reported:  6/19/2024 3:42:40PM
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Wet Chem/Gravimetric by SM2540C

Analyst: JL

Analyte	Result mg/L	Reporting Limit mg/L	Spike Level mg/L	Source Result mg/L	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2424110-BLK1)					Prepared: 06/14/24 Analyzed: 06/19/24				
Total Dissolved Solids	ND	10.0							
LCS (2424110-BS1)					Prepared: 06/14/24 Analyzed: 06/19/24				
Total Dissolved Solids	107	10.0	100		107	55-134			
Duplicate (2424110-DUP1)					Source: E406110-01 Prepared: 06/14/24 Analyzed: 06/19/24				
Total Dissolved Solids	1320	10.0		1290			2.68	5	



QC Summary Data

Morningstar Operating LLC.	Project Name:	Navajo Indian #6E	Reported:
811 S. Main Ave.	Project Number:	20100-0001	
Aztec NM, 87410	Project Manager:	Denise Casaus	6/19/2024 3:42:40PM

Wet Chemistry by 9040C/4500H+B

Analyst: WF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	pH Units	pH Units	pH Units	pH Units	%	%	%	%	

LCS (2424100-BS1)	Prepared: 06/14/24 Analyzed: 06/14/24								
pH	7.96		8.00		99.7	98.75-101.25			
Duplicate (2424100-DUP1)	Source: E406110-01 Prepared: 06/14/24 Analyzed: 06/14/24								
pH	11.8			11.8		0.0425	20		



QC Summary Data

Morningstar Operating LLC.	Project Name:	Navajo Indian #6E	Reported:
811 S. Main Ave.	Project Number:	20100-0001	
Aztec NM, 87410	Project Manager:	Denise Casaus	6/19/2024 3:42:40PM

Wet Chemistry by SM2320B

Analyst: KH

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	

LCS (2425034-BS1)					Prepared: 06/18/24 Analyzed: 06/18/24				
Total Alkalinity (as CaCO3 at pH 4.5)	248	10.0	250		99.2	70-130			
Duplicate (2425034-DUP1)					Source: E406110-01		Prepared: 06/18/24 Analyzed: 06/18/24		
Total Alkalinity (as CaCO3 at pH 4.5)	860	10.0		850			1.17	20	





QC Summary Data

Morningstar Operating LLC.	Project Name:	Navajo Indian #6E	Reported:
811 S. Main Ave.	Project Number:	20100-0001	
Aztec NM, 87410	Project Manager:	Denise Casaus	6/19/2024 3:42:40PM

Wet Chemistry by 9050A/2510B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	uS/cm	uS/cm	uS/cm	uS/cm	%	%	%	%	

Blank (2425012-BLK1)	Prepared: 06/17/24 Analyzed: 06/17/24								
Specific Conductance (@ 25 C)	ND	10.0							
LCS (2425012-BS1)	Prepared: 06/17/24 Analyzed: 06/17/24								
Specific Conductance (@ 25 C)	1410	10.0	1410		99.8	98-102			
Duplicate (2425012-DUP1)	Source: E406135-01 Prepared: 06/17/24 Analyzed: 06/17/24								
Specific Conductance (@ 25 C)	188000	20.0		187000			0.918	20	

QC Summary Data

Morningstar Operating LLC.	Project Name:	Navajo Indian #6E	Reported:
811 S. Main Ave.	Project Number:	20100-0001	
Aztec NM, 87410	Project Manager:	Denise Casaus	6/19/2024 3:42:40PM

Dissolved Metals by EPA 6010C

Analyst: JL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	

Blank (2425001-BLK1) Prepared: 06/17/24 Analyzed: 06/19/24

Calcium	ND	1.00
Iron	ND	2.00
Magnesium	ND	1.00
Potassium	ND	1.00
Sodium	ND	2.00

LCS (2425001-BS1) Prepared: 06/17/24 Analyzed: 06/19/24

Calcium	48.7	1.00	50.0	97.4	80-120
Iron	99.2	2.00	100	99.2	80-120
Magnesium	53.4	1.00	50.0	107	80-120
Potassium	4.91	1.00	5.00	98.3	80-120
Sodium	19.6	2.00	20.0	98.1	80-120

LCS Dup (2425001-BSD1) Prepared: 06/17/24 Analyzed: 06/19/24

Calcium	49.2	1.00	50.0	98.5	80-120	1.10	20
Iron	99.9	2.00	100	99.9	80-120	0.763	20
Magnesium	50.8	1.00	50.0	102	80-120	4.92	20
Potassium	4.92	1.00	5.00	98.4	80-120	0.163	20
Sodium	18.8	2.00	20.0	94.0	80-120	4.27	20

Matrix Spike (2425001-MS1) Source: E406110-01 Prepared: 06/17/24 Analyzed: 06/19/24

Calcium	53.4	1.00	50.0	3.29	100	75-125	
Iron	101	2.00	100	ND	101	75-125	
Magnesium	55.8	1.00	50.0	ND	112	75-125	
Potassium	6.16	1.00	5.00	1.01	103	75-125	
Sodium	701	20.0	20.0	603	494	75-125	M4

Matrix Spike Dup (2425001-MSD1) Source: E406110-01 Prepared: 06/17/24 Analyzed: 06/19/24

Calcium	54.2	1.00	50.0	3.29	102	75-125	1.38	20
Iron	102	2.00	100	ND	102	75-125	0.492	20
Magnesium	57.7	1.00	50.0	ND	115	75-125	3.29	20
Potassium	6.42	1.00	5.00	1.01	108	75-125	4.10	20
Sodium	666	20.0	20.0	603	318	75-125	5.13	20



QC Summary Data

Morningstar Operating LLC. 811 S. Main Ave. Aztec NM, 87410	Project Name: Navajo Indian #6E Project Number: 20100-0001 Project Manager: Denise Casaus	Reported:  6/19/2024 3:42:40PM
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Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	

Blank (2424074-BLK1)

Prepared: 06/12/24 Analyzed: 06/12/24

Fluoride	ND	0.250
Chloride	ND	2.00
Nitrite-N	ND	0.250
Nitrate-N	ND	0.250
o-Phosphate-P	ND	0.250
Sulfate	ND	2.00

LCS (2424074-BS1)

Prepared: 06/12/24 Analyzed: 06/12/24

Fluoride	2.62	0.250	2.50	105	90-110
Chloride	25.3	2.00	25.0	101	90-110
Nitrite-N	2.58	0.250	2.50	103	90-110
Nitrate-N	2.64	0.250	2.50	105	90-110
o-Phosphate-P	12.9	0.250	12.5	103	90-110
Sulfate	25.2	2.00	25.0	101	90-110

LCS Dup (2424074-BSD1)

Prepared: 06/12/24 Analyzed: 06/12/24

Fluoride	2.61	0.250	2.50	104	90-110	0.291	20
Chloride	25.2	2.00	25.0	101	90-110	0.332	20
Nitrite-N	2.57	0.250	2.50	103	90-110	0.303	20
Nitrate-N	2.63	0.250	2.50	105	90-110	0.285	20
o-Phosphate-P	12.9	0.250	12.5	103	90-110	0.269	20
Sulfate	25.2	2.00	25.0	101	90-110	0.263	20

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Morningstar Operating LLC.	Project Name:	Navajo Indian #6E	
811 S. Main Ave.	Project Number:	20100-0001	Reported:
Aztec NM, 87410	Project Manager:	Denise Casaus	06/19/24 15:42

- C1The CV recovery was above method acceptance limits.
- H5pH is specified to be performed in the field within 15 minutes of sampling. The sample analysis was performed as quickly as possible.
- M4Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
- NDAnalyte NOT DETECTED at or above the reporting limit
- NRNot Reported
- RPDRelative Percent Difference
- DNIDid Not Ignite
- DNRDid not react with the addition of acid or base.

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

[illegible]

## Envirotech Analytical Laboratory

Printed: 6/12/2024 2:06:30PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Morningstar Operating LLC.	Date Received:	06/11/24 13:47	Work Order ID:	E406110
Phone:	(505) 419-6055	Date Logged In:	06/12/24 12:28	Logged In By:	Raina Schwanz
Email:		Due Date:	06/18/24 17:00 (5 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: DJ EdwardsComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:  
Sample ID? Yes  
Date/Time Collected? Yes  
Collectors name? Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? Yes

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
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Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

COMMENTS  
  
Action 356303

COMMENTS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 356303
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

COMMENTS

Created By	Comment	Comment Date
mkuehling	TDS 1320	7/8/2024

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
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**District III**  
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**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 356303

CONDITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 356303
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	7/8/2024