



SULFUR IN NATURAL GAS ANALYSIS

SN/PRIMARY DB KEY
LEASE #/ PROJECT #:
FIELD/AREA:

NAME/DESCRIP : **NICHOLS 24-02W**
SALES GAS
SAMPLE #4

PROJECT NO. : **202302038**
COMPANY NAME : **LARAMIE ENERGY, LLC**
OFFICE / BRANCH: **GRAND JUNCTION, CO**
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : **04**
ANALYSIS DATE: **FEBRUARY 08, 2023 15:00**
SAMPLE DATE : **FEBRUARY 6, 2023 12:00**
TO:
EFFECTIVE DATE:

FIELD DATA

SAMPLE CYCLE:
SAMPLE PRES. : **psig**
FLOW PRES. : **psig**
LAB PRES: **psig**
SAMPLE TEMP. : **°f**
AMBIENT TEMP.: **°f**
H2O BY STAIN TUBE: **- #/mmcf**
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: **SPOT**
PROBE : **YES**
CYLINDER NO. : **1L TEDLAR**
SAMPLED BY : **GALE MCENDREE**
SAMPLING COMPANY: **EMPACT**
H2S BY STAIN TUBE: **- ppm mol**
CO2 BY STAIN TUBE: **- Mol %**

COMPONENT

SULFUR
ppm mole
(ul/L)

| | |
|---|------------|
| Hydrogen Sulfide (H2S) | 4.0 |
| Carbonyl Sulfide (COS)/Sulfur Dioxide (SO2) | BDL |
| Methanethiol (MeSH) | BDL |
| Ethanethiol (EtSH) | BDL |
| Dimethylsulfide (DMS) | 0.4 |
| Carbon Disulfide (CS2) | BDL |
| i-Propanethiol (i-PrSH) | BDL |
| t-Butanethiol (t-BuSH) | BDL |
| n-Propanethiol (n-PrSH) | BDL |
| Methylethylsulfide (MES) | BDL |
| s-Butanethiol (s-BuSH) | BDL |
| i-Butanethiol (i-BuSH) | BDL |
| Thiophene (TP) | BDL |
| Diethylsulfide (DES) | BDL |
| n-Butanethiol (n-BuSH) | BDL |
| Dimethyldisulfide (DMDS) | BDL |
| Unidentified Sulfurs - Light Ends | BDL |
| Methylthiophenes (MTP) | BDL |
| 2-Ethylthiophene (2-ETP) | BDL |
| Methylethylsulfide (MEDS) | BDL |
| Dimethylthiophenes (DMTP) | BDL |
| Diethyldisulfide (DEDS) | BDL |
| Benzothiophene (BzTP) | BDL |
| Unidentified Sulfurs - Mid Range | BDL |
| Methylbenzothiophenes (MBzTP) | BDL |
| Dimethylbenzothiophenes (DMBzTP) | BDL |
| Trimethylbenzothiophenes (TMBzTP) | BDL |
| Dibenzothiophenes (DBzTP) | BDL |
| Methyldibenzothiophenes (MDBzTP) | BDL |
| <u>Unidentified Sulfurs - Heavy Ends</u> | <u>BDL</u> |
| TOTAL SULFUR | 4.4 |

* ASTM D5504 ** DETECTION LIMIT DETERMINED TO BE 0.1 ppm (ul/L) Sulfur - BDL (BELOW DETECTION LIMIT)

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