



NWT OFFICE OF THE REGULATOR OF OIL AND GAS OPERATIONS

Office of the Regulator of Oil and Gas Operations

P.O. Box 1320, Yellowknife, NT X1A 2L9

Tel: 867-767-9097 • Fax: 867-920-0798 • Web: www.oroogo.gov.nt.ca

Courier Address: 4th floor, 5201 – 50th Avenue, Yellowknife, NT X1A 3S9

Duncan MacRae,
Director
Strategic Oil & Gas Ltd.
Suite 1100, 250 – 6 AVE SW
CALGARY, AB T2P 3H7

March 6, 2023

Dear Duncan MacRae:

Inspection: Cameron K-74 (WID 1972) Well – ACW-2023-SOG-K-74-WID1972

Inspectors Michael Martin, Chief Safety Officer/Chief Conservation Officer, and Brandon Bradbury, Safety Officer/Conservation Officer inspected the abandonment of the Cameron K-74 (WID1972) well on February 21, 2023.

The inspection was carried out to ensure Strategic Oil & Gas Ltd was adhering to the terms of the Well Approval for this operation (ACW-2021-SOG-K-74-WID1972). The Inspectors met with Mr. Tim Schmidt, Well Site Supervisor/Consultant, on site.

Please see the attached Operations Summary Inspection Report for your reference. This report will be posted to the Office of the Regulator of Oil and Gas Operations' Public Registry at www.oroogo.gov.nt.ca.

If you have any questions, please contact me at (867) 767-9097 or by email at Mike_Martin@gov.nt.ca.

Sincerely,

Michael Martin
Chief Safety Officer
Chief Conservation Officer

Encl. Cameron K-74 (WID 1972) Operation Summary Inspection Report – February 21, 2023

- c. Department of Lands, South Slave Region.
Department of Environment and Natural Resources, South Slave Region.
Chris Gemmill, Director of Operations, Environmental Liability Management Inc.

OROGO Operations Inspection Summary Report

Well Information

Well name: Cameron K-74

4 digit WID: 1972

Operator: Strategic Oil & Gas Ltd
c/o Alvarez & Marshal Canada ULC.
Well status: Suspended

OROGO risk level: Level 2

Shallow wellbore plug? Yes No

24-hour operations? Yes No

Coordinates (*In decimal degrees; verified onsite*)

Datum: NAD 27 NAD 83 Unknown

Lat: 60° 03' 41.1" N

Long: 117° 29' 32.3" W

Completed in H₂S zone? Yes

Estimated % of H₂S: 4% or

Measured % of H₂S: 0%

Program step on arrival: 21: Forward circulate well over to fresh water, over displace my 2 m3 to ensure well is clean.

Program step on departure: 24: Rig out the coil tubing injector

Inspection Date and Contact Information

Date of inspection: February 21, 2023

Access method: Vehicle

OROGO Inspectors:

- Michael Martin – Chief Safety Officer /
Conservation Officer

- Brandon Bradbury – Safety Officer/Conservation
Officer

Activity Inspected

OA#: OA-2018-003-Strategic

Nature of activity: Abandonment

ACW#: ACW-2023-SOG-K-74-WID 1972

Contractor on site (if applicable):

Name: Shane Elliot

Company: Titanium Energy Services

Rig Number: Coiled Tubing Unit 1024

Phone: (780) 875-1395

Email: N/A

Inspection Results

Rig Safety

Accumulator
function test

Compliant

Non-Compliant

Corrected Non-Compliance

Comments: Function Test Compliant

Stripper: held pressure with no bleed off.

Annular: held pressure with no bleed off.

Version: August 23, 2022

Equipment certifications	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Serial Numbers of equipment inspected matched the certifications supplied in the field. - Articulating Boom Crane: 15580(Photos #1-2) - Annular: 679110-2 (Photos #3-5)
Authorization / Approval available	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments:
Boiler inspection	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non-Compliance	Comments: Boiler (Serial # 4211) certifications were readily available and matched the on-site equipment (Photo #6-8).
Guards and covers on moving equipment	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: All guards and covers on moving equipment were in a condition satisfactory to the Inspectors.
Pump lines and hoses secured, intact and appropriate?	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: All pump lines/hoses were secured and in a condition satisfactory to the Inspectors (Photos #9 & 10).
Adequate lighting	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments:
Wind indicators visible and functional	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments:
Fire extinguishers	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: All fire extinguishers inspected have been recertified within the last 12 months.
Equipment spacing	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: The lease site at K-74 provided adequate spacing for equipment in accordance with IRP 20. - Rig Tank to Well Centre:47m (>15m)
Engine kills	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Engine kills operated as designed and required manual reset of the air kill mechanism (Photo #11).
Sufficient N ₂ back-up?	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: N/A as this is a Coiled Tubing Unit. This unit had manual pumps to pressurize the BOP (Photo #12).
Flow turns	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: All flow turns inspected were compliant and installed correctly. (Photo #9)
General housekeeping	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: The site was generally clean, and the Inspectors had no concerns with housekeeping throughout the site.
Other Rig Safety notes:		

Personnel Safety

- Valid safety tickets Compliant
 First Aid / CPR Non-Compliant
 H2S Corrected Non- Compliance
 WHIMS
 TDG
 BOP
 Other (specify in comments)

Comments: All safety tickets inspected were valid at the time of inspection.

Safety meetings and documentation	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Safety practices were re-enforced and potential hazards of that day's operations were identified and therefore, no concerns were noted (Photo #13).
SCBAs and/or supplied air available and visible	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: SCBA: 2 located near the Coiled Tubing Unit and 2 located at lease entrance (Photo #14).
First Aid equipment and EMS on site and accessible	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: First aid kits located through out site. There was a paramedic at camp as well as a medic located centrally to the 3 active operations in the area.
Gas detection equipment on site and accessible	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: K-74 is a known H ₂ S site, and the Inspectors were pleased to see multiple wind indicators, along with all personnel wearing individual gas detection monitors that included H ₂ S sensors.
Communication plans available	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments:
Hazard identification and signage	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Hazard signage was placed at the lease entrance and no concerns were noted (Photo #15).
ERP available upon request	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Was located in the consultant's truck during operations.
Safety Plan available upon request	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Was located in the consultant's truck during operations.
BOP drills and documentation	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Functioning of the annular and stripper was completed during the inspection and no concerns were noted.
Function tests and documentation	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Function test was completed upon completion of the down hole abandonment operations and the annular and stripper were operating as designed.

Other Personnel Safety notes:

Coiled Tubing Unit crew and other on-site personnel showed a knowledge and understanding of the safe operation of the unit and associated equipment.

Blowout Prevention Equipment

BOP certifications	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments:
BOP pressure rating	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: The BOP used for this operation was appropriate pressure rating for this well.
Kill sheet in dog house	<input type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: N/A
Stabbing valves and cross-overs	<input type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: N/A
Flow lines and choke lines secured	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: As seen in Photo #9 &10, flow lines and choke lines were secured.

Other Blowout Prevention Equipment notes:

All blowout prevention equipment had a valid certification and appeared to be well maintained.

Specific to Shallow Wellbore Plug (Not Applicable)

Snubbing unit in place	<input type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments:
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Other Shallow Wellbore Plug notes:

Click or tap here to enter text.

Specific to 24-Hour Operations (Not Applicable)

Cross-over notes	<input type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Click or tap here to enter text.
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Other 24-hour operations notes:

Click or tap here to enter text.

Environment

Rig matting	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Not required for this operation.
Drip trays	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments: Drip trays were located under equipment to prevent the possibility of hydrocarbon impacts to the underlying ground.
Materials handling and storage	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments:
Spill response equipment on site and accessible	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non-Compliant <input type="checkbox"/> Corrected Non- Compliance	Comments:

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Tubing laydown area protection Compliant
 Non-Compliant
 Corrected Non- Compliance

Comments: N/A-Coiled Tubing Rig.

Other Environment notes:

Safety Plan

Compliant? Yes No Comments: Click or tap here to enter text.

Environmental Protection Plan

Compliant? Yes No Comments: Click or tap here to enter text.

Emergency Response (Contingency) Plan

Compliant? Yes No Comments: Click or tap here to enter text.

Authorization and Approvals

Following program as approved? Yes No Comments:

Meeting all conditions? Yes No Comments:

Other Documents Requested / Received During Inspection

Details:

Photographs

Number of photographs attached: 15

Additional Comments / Observations

Overall, there were no concerns noted during the inspection and the Inspectors were pleased with operation and the cooperation of the onsite staff.

This inspection was conducted under the *Oil and Gas Operations Act* and associated regulations.

Name: Michael Martin

Designation: Chief Safety Officer

Date: 2023-03-06

Signature:



Name: Brandon Bradbury

Designation: Safety Officer

Date: 2023-03-06

Signature:



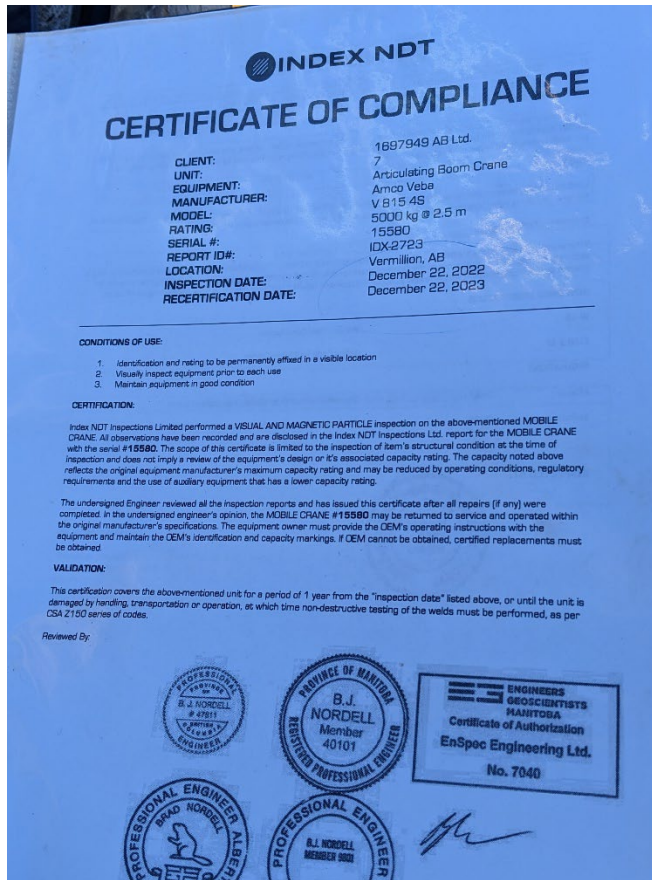


PHOTO #1: Certificate of compliance for the articulating boom crane.

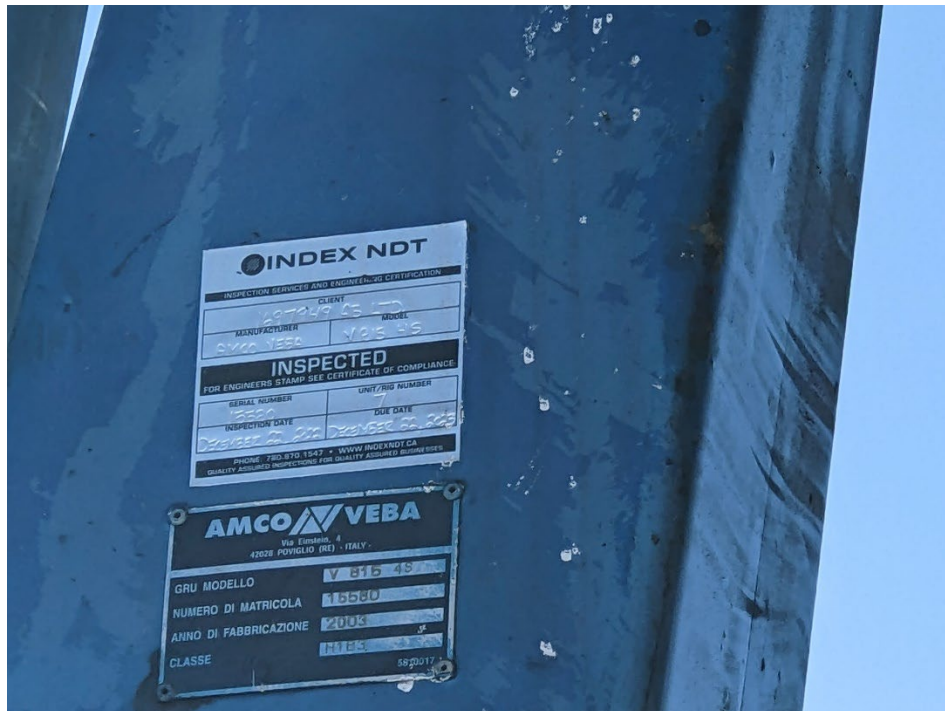


PHOTO #2: Articulating boom crane identification seal.



PHOTO #3: Coiled tubing annular disconnected after down hole abandonment operations were complete.



PHOTO #4: Annular tag matching the certification.

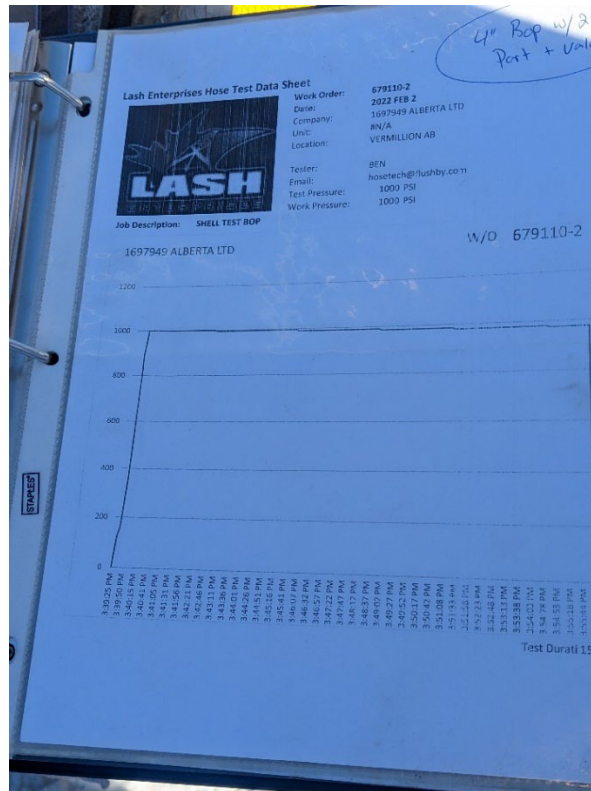


PHOTO #5: Annular certification pressure tested February 2, 2022



PHOTO #6: On-site Boiler.



PHOTO #7: Boiler identification seal.

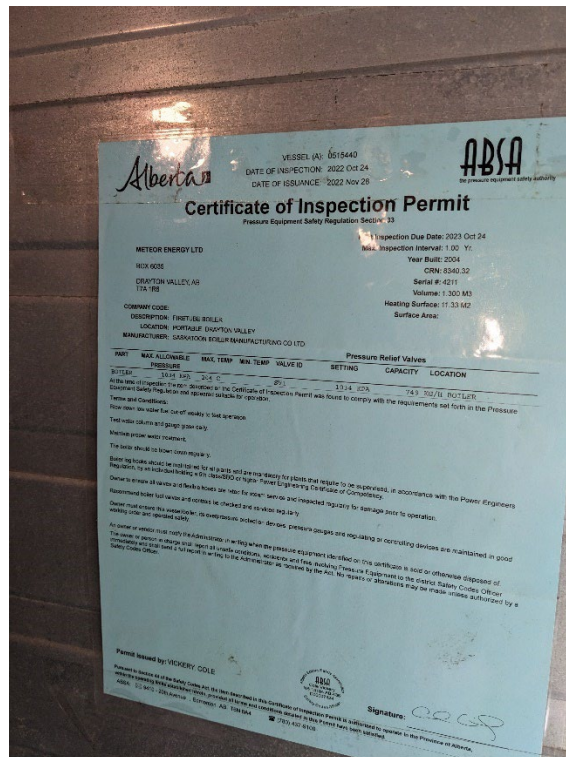


PHOTO #8: Boiler certification.



PHOTO #9: Pump line between well and rig tank.



PHOTO #10: Pump line between well and rig tank secured between joints.

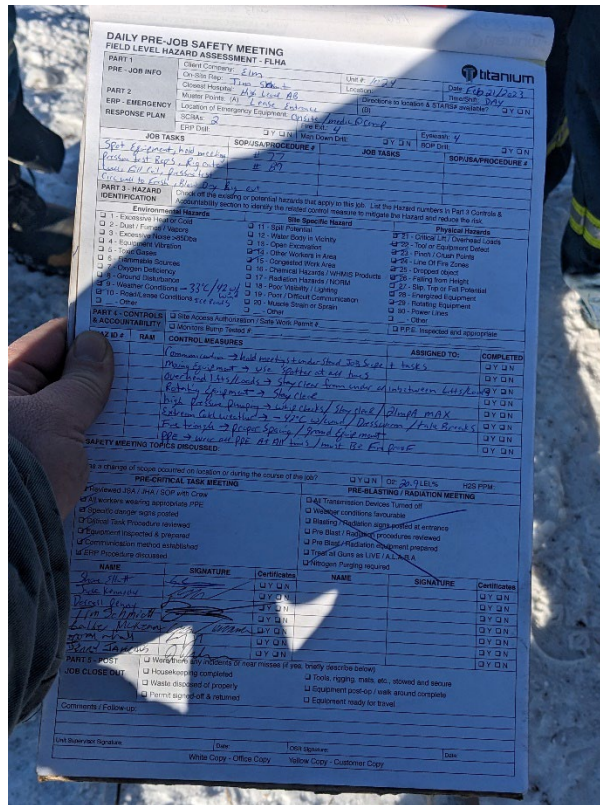


PHOTO #11: Air cut off device that is part of the engine kill assembly.



PHOTO #12: Manual pumps to pressurize Coiled Tubing Unit BOP.

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DAILY PRE-JOB SAFETY MEETING
FIELD LEVEL HAZARD ASSESSMENT - FLHA

PART 1 - PRE-JOB INFO
On Site For: 21 Feb 2023 Location: Posi3
Client: Bitanium

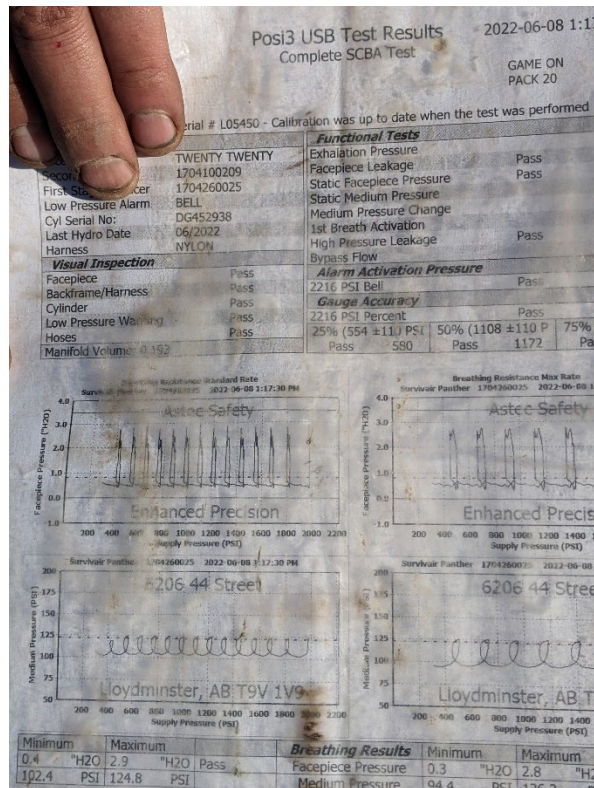
PART 2 - EMERGENCY RESPONSE PLAN
Emergency Response: Call 911
Location of Emergency Equipment: Call 911
EPR: 2

PART 3 - HAZARD IDENTIFICATION
List the Hazards in Part 3 Control & Mitigation Measures to identify the Hazards and reduce the risk.

PART 4 - CONTROLS & ASSURABILITY
Site Access: 21 Feb 2023
Monitor: 21 Feb 2023

SAFETY MEETING TOPICS DISCUSSED

PHOTO #13: Record of February 21, 2023 pre safety job meeting.



Posi3 USB Test Results
Complete SCBA Test
2022-06-08 1:17
GAME ON
PACK 20

Serial # L05450 - Calibration was up to date when the test was performed

Functional Tests

Exhalation Pressure	Pass
Facepiece Leakage	Pass
Static Facepiece Pressure	Pass
Medium Pressure Change	Pass
1st Breath Activation	Pass
High Pressure Leakage	Pass
Bypass Flow	Pass

Visual Inspection

Facepiece	Pass
Backframe/Harness	Pass
Cylinder	Pass
Low Pressure Warning	Pass
Hoses	Pass
Manifold Volume: 0.152	Pass

Alarm Activation Pressure

2216 PSI Bell	Pass
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Gauge Accuracy

2216 PSI Percent	Pass	
25% (554 ±11) PSI	50% (1108 ±110 P)	75%
Pass 580	Pass 1172	Pass

Breathing Resistance Graphs

Graph 1: 206.44 Street, Lloydminster, AB T9V 1V9
Graph 2: 6206 44 Street, Lloydminster, AB T9V 1V9

Breathing Results

Minimum	0.4	H2O	2.9	H2O	Pass
Maximum	102.4	PSI	124.8	PSI	
Minimum	0.3	H2O	2.8	H2O	
Maximum	94.4	PSI	126.3	PSI	

PHOTO #14: Record of inspection of one of the SCBA's on site.



PHOTO #15: Hazard identification signs in place.