

ENHANCED OIL RECOVERY PROGRAM (EORP) GUIDELINES

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1.0 INTRODUCTION

The Alberta Government is encouraging the use of enhanced oil recovery (EOR) methods to optimize the province's petroleum resources. EOR recovery methods that use the injection of fluids such as hydrocarbons, carbon dioxide, nitrogen, chemicals or other approved substances allow for the recovery of additional oil. To promote this additional recovery, the Crown has introduced the Enhanced Oil Recovery Program ("EORP").

These guidelines are issued to explain the administration of the Enhanced Oil Recovery Program under the Enhanced Oil Recovery Royalty Regulation (AR156/2014) ("the Regulation") and to assist operators in completing the application process. This document reflects policies and procedures effective January 1, 2014, unless otherwise noted.

In the event of any conflict, the Mines and Minerals Act and the Regulation shall take precedence over these guidelines.

Inquiries can be directed to:

Manager, Oil Royalty Programs and Rates
Resource Revenue and Operations
Alberta Energy
7th Floor, North Petroleum Plaza
9945 - 108 Street
Edmonton, Alberta T5K 2G6

Email: ODEdm@gov.ab.ca

2.0 APPLICATION PROCESS

2.1 Submission

To receive the Program for a scheme, the operator must apply to Alberta Energy under the Enhanced Oil Recovery Royalty Regulation AR156/2014. The operator must also apply for scheme approval to the Alberta Energy Regulator (AER) under Section 39 of the Oil and Gas Conservation Act.

The applications can be submitted at the same time however, Alberta Energy will not approve a scheme that does not have AER approval. It is the operator's responsibility to supply a copy of the AER approval to Alberta Energy.

Applications for EORP should be sent to:

Director, Oil Royalty Operations
Resource Revenue and Operations
Alberta Energy
7th Floor, North Petroleum Plaza
9945 – 108th Street
Edmonton, Alberta T5K 2G6

A copy of the EORP application should also be sent to:

Director Authorizations Subsurface (Oil & Gas)
Alberta Energy Regulator
Suite 1000, 250 – 5th Street SW
Calgary, Alberta T2P 0R4

2.2 Application Template

Alberta Energy has a template available on the website at www.energy.alberta.ca to collect the data required in a consistent format to expedite application approvals.

The application must include detailed technical and economic data on the base case (usually water flood) and on the EOR proposal. New approved schemes will receive up to a five per cent maximum royalty rate for a term based on the tertiary factor for the pool. The tertiary factor (T-factor) is calculated by Alberta Energy using the AER reserve information.

2.3 Information Required in the EORP Application

Economic and technical information is required for both the base case and the enhanced recovery case for production. See Section 3.1 for examples for the criteria required for EORP approval.

Enhanced recovery case should include incremental EOR costs only.

All data must be submitted in metric units.

All capital costs and operating expenses for the forecasts are expressed in constant dollars; either for the year in which the application is made or for the starting year of injection.

The base recovery scheme will be conventional primary and secondary production techniques (water flood, gas cycling, etc.) unless there is evidence otherwise. When moving to a new production technique, the previous scheme's production will be the base recovery scheme.

2.3.1 Scheme Area

- Maps showing definition of scheme area(s).
- All data to be submitted for both the total scheme area(s) and the Crown portion only.
- EOR schemes are for single pools; no multiple pool schemes will be approved.
- A copy of AER Section 39 approval (can be forwarded when approved).

2.3.2 Scheme Reserve and Technical Data

- Type of scheme (HCMF, WAG, CO₂, Acid Gas, ASP).
- EOR Flood Orientation (Vertical/Horizontal).
- T-factor.
- Oil Density (kg/m³).
- Oil Sulfur Content (per cent wt.).
- Solution GOR.
- Initial Oil-In-Place.
- Base Case Recovery.
- Ultimate Enhanced Case Recovery.
- Net Cumulative Production as of Injection Date.

2.3.3 Production – Base Case and Enhanced Case

- Oil production by year.
- Raw gas production by year.
- Sales gas and NGLs by year.
- Number of oil production, gas production and injection wells.
- Injection volumes – Gas, NGLs, and /or other (CO₂, ASP, Nitrogen, etc.).
- Production Start Date (MM/YYYY) for base case and enhanced.
- Production End Date (MM/YYYY) for base case and enhanced.

2.3.4 Costs – Incremental Case

2.3.4.1 Capital

Capital costs must be approved for expenditure (AFE) numbers based on the selection of appropriate technology. Costs that are directly related and required to inject approved substances and increase oil recovery above a base recovery scheme should be included.

2.3.4.2 Injection

Alberta Energy will estimate the opportunity cost of injected hydrocarbons based on the applicant's production forecast and the Department's production price forecast. Acquisition costs must be provided for non-hydrocarbon injectant (including CO₂, acid gas, nitrogen, and ASP). In cases where a fair market value cannot be established, a cost of service calculation must be provided.

2.3.4.3 Direct Operating

Costs directly related and required to inject approved substances and increase oil recovery above a base recovery scheme.

2.3.4.4 Inflation

If an adjustment from nominal values is required, a two per cent inflation rate should be used.

2.3.5 Technical Risk Analysis

Technical risks should be described for the enhanced case and related to reservoir characteristics and geological conditions.

3.0 ADMINISTRATION OF SCHEMES

The Crown shares in the cost to develop the scheme by reducing the amount of Crown royalty due on the crude oil production from the scheme. Once a scheme is approved under the Regulation, all well events producing Crown oil from the scheme area will receive up to a five per cent maximum royalty rate for the term.

The Oil Royalty Operations unit of the Royalty Operations Branch administers the EORP under the Regulation.

Alberta Energy will attend the AER annual scheme reviews and may, from time to time, request additional information to evaluate the continued inclusion in the EORP. Also, operators of approved schemes may be required to provide annual reports and/or presentations to Alberta Energy.

3.1 Approval

Alberta Energy, in consultation with the AER, evaluates each application under the Regulation. These are some of the key criteria for EORP approval:

- The scheme must be an enhanced recovery scheme.
- The scheme must receive technical approval from the AER under Section 39 of the Oil and Gas Conservation Act.
- The scheme must use the injection of hydrocarbons, carbon dioxide, nitrogen, chemicals or other material approved by the Minister.
- The scheme must produce more crude oil from the pool than could be produced under the base recovery scheme for that pool.
- The costs to implement and operate the scheme are significantly greater than the costs to implement and operate the base recovery scheme.
- A technical and economic review of the scheme by Alberta Energy, determines that approving a scheme under the program is in the public interest.
- If a client has received any other government grants or benefits, these will be considered by Alberta Energy during the approval process.

During the approval process, Alberta Energy will:

- Contact the appropriate company representatives to rectify any deficiencies in the application.
- Evaluate the application, including the tertiary factor (the AER will be consulted as necessary).
- Examine the technical risks associated with the scheme (the AER will be consulted as necessary). Review projected costs in relation to expected incremental recovery.
- Make a recommendation to the Minister.
- Notify the applicant by letter of the Minister's decision.

In the approval, Alberta Energy may establish terms and conditions relating to the scheme. Alberta Energy may also amend the approval to add, change or delete those terms and conditions.

Operators of approved schemes may be advised of:

- The initial month of the five per cent royalty rate.
- The tertiary factor used to determine the term of relief.
- Term of relief.
- Well events in the approved scheme area.

3.2 Minimum Level of Well Event Evaluation

To receive the five per cent maximum royalty rate the well event must meet the following:

- classified as an oil well event
- have Oil Crown interest
- tied to a scheme approved under the Regulation
- producing from the same pool as the rest of the scheme
- outside of an Oil Sands Area as defined by the AER
- not a commingled well event
- not previously tied to another scheme unless the new scheme is using different technology

If a well event becomes ineligible, the five per cent maximum royalty rate will terminate on the last day of the month in which it became ineligible.

3.3 Scheme Enhancement or Expansion

Revised operating strategies, which continue to meet eligibility requirements and conditions of the AER approval and the Alberta Energy EORP approval (same technology and no change of injectant) do not require approval by Alberta Energy.

When approved scheme areas are amended to add production wells, the operator must notify Alberta Energy to have the wells added to the scheme. If AER amends the scheme boundary to include wells outside the original scheme boundary, Alberta Energy will update the current scheme to include the wells, unless it is a new injection pattern being added.

An expansion to an existing scheme area requires that a new application for EORP be submitted to Alberta Energy and the application must contain all the information requirements for a new scheme. An expansion requires at least one new injection pattern consisting of an injection and production wells. Expansions are considered new schemes and upon approval will be issued a unique scheme number and relief term based on the tertiary factor of the pool. More than one scheme can be approved in a pool; however, a scheme can only be for one pool.

Schemes that change injectant or recovery technique will require a new program application and approval.

Schemes that received relief under previous EOR programs and were completed or fully paid out, may apply as a new scheme if a different injectant or recovery technique is being used.

3.4 Termination or Suspension of Approval

3.4.1 Termination or Suspension by Operators

An operator may request termination or suspension of the EORP approval for a scheme before the end of the scheme's term under the program. Requests must be made by the operator on official letterhead. The operator must specify the date they want the EORP approval to be suspended or terminated. The date must be the last day of a month.

3.4.2 Termination of EOR Scheme Approval by AER

Termination of the AER approval will, in all instances, result in the EORP approval being terminated. The termination date will be the last day of the month in which AER terminates their approval. This may result in a recalculation of the royalty for any months after the termination date that have already been processed.

3.4.3 Termination or Suspension by Alberta Energy

Alberta Energy may choose to terminate or suspend an EORP approval according to Sections 13 and 14 of the Regulation. The date will be the last day of the month. The Operator will be notified of the suspension or termination. This may result in a recalculation of royalty.

3.5 Transition Schemes

Schemes that were approved and were still active under the previous Enhanced Recovery of Oil Royalty Reduction Regulation (AR 348/1993) have been transitioned into the Program. See Section 7.0.

3.6 Terms for Royalty Rate

The length of term:

- will be applied at the scheme level.
- is determined by the T-factor (see Section 4.0).
- will have a minimum of three consecutive calendar months (T-factor of 0.224); and a maximum of 120 consecutive calendar months (T-factor between 0.781 and 1.000).

Once the scheme has reached the end of its term, all well events within that scheme are no longer eligible for the five per cent maximum royalty rate.

Pre-development pilots and commercial schemes are eligible for the Program.

If transactions are determined to be artificial, the five per cent maximum royalty rate will be recalculated at the Minister's discretion.

3.7 EORP Start Date

The EORP start date is the first day of the month that the scheme begins to receive the five per cent maximum royalty rate.

The operator has the option of requesting the start date of the five per cent maximum royalty rate. Alberta Energy must be notified in writing within 36 months from the date of first injection. Notice must be received prior to the first day of the month requested by the operator. If notice is not received, the first day of the month following 36 calendar months after the date of first injection will be used.

Example 1

Date of First injection: January 15, 2015

- Operator notifies Alberta Energy of requested start date of May 1, 2016 on March 15, 2016

EORP start date: May 1, 2016

Example 2

Date of first injection: January 15, 2015

- No notice received from operator

EORP start Date: February 1, 2018

The operator does not have to wait until Alberta Energy approves the scheme to send notice. However, the rate will not be applied using that start date until after the scheme is approved.

An operator may choose to amend the EORP start date they have selected, provided that it is still within the 36 month time frame and the five per cent maximum royalty rate has not been applied.

3.8 EORP Termination Date

The EORP termination date is the date that the five per cent maximum royalty rate ends. All well events in the scheme will cease to receive the five per cent maximum royalty rate. The EORP termination date will be the last day of the month.

4.0 TERTIARY FACTOR CALCULATION (T-FACTOR)

The T-factor of an approved scheme determines the length of time that the five per cent maximum royalty rate will apply.

The T-factor is defined as the greater of 0.224 or the difference between the recoverable crude oil reserves estimated for the scheme and the recoverable crude oil reserves from the base case (i.e. the incremental crude oil recoverable from the pool over the life of the scheme), divided by the total amount of crude oil that in the Minister's opinion remains to be recovered from the pool.

$$\text{T-factor} = \frac{\text{Incremental crude oil recoverable from the pool over the scheme life}}{\text{Remaining recoverable crude oil reserves at start of the scheme}}$$

The maximum T-factor allowed is 1.000.

Alberta Energy establishes the T-factor based on AER reserve recognition. It will be the scheme operator's responsibility to submit applications to the AER for reserve recognition for new schemes, and any subsequent revisions to a scheme as to the size of established reserves. The operator will be advised of the T-factor that Alberta Energy has established for the scheme based on the AER reserves. Oil migration will be considered in determining the remaining recoverable value when reservoirs are partially miscible flooded as in the case of staged development of large horizontal floods.

Alberta Energy may request the AER to review the reserves for a pool with regard to the scheme's current performance, its projected performance, and the appropriateness of the established reserves. The T-factor will be revised by Alberta Energy to be consistent with any changes to scheme reserves.

4.1 No Established Reserves

Alberta Energy has developed a temporary T-factor for new or expanded schemes. The temporary T-factor is intended for those schemes using new or less established methodologies for enhanced oil recovery, where the information necessary to establish a T-factor is not readily available.

A temporary T-factor of 0.324 (which is equivalent to a 24 calendar month term) applies to new schemes in the absence of established AER reserves.

If the T-factor on the operator's application is less than 0.324, that shorter term will be used until reserves are established.

At the end of the shorter term, the scheme will be suspended until the reserves are established or the 24 calendar month term has passed.

If the AER does not establish reserves within the 24 month time frame the scheme may be terminated.

The time frame may be increased by an additional 12 months (to a maximum of 36 months) under exceptional circumstances upon application to Alberta Energy.

If reserve information is not received at the end of the extended period, the scheme will be terminated and the up to five per cent maximum royalty rate will only apply to the initial 24 months.

A royalty recalculation will not go back into statute barred years.

4.2 Established Reserves

If AER has established reserves assigned to the scheme when the scheme is approved, Alberta Energy will use these reserves to calculate a T-factor for the scheme and the appropriate program term will be established.

If the T-factor:

- increases during the term, the term will be extended accordingly as long as the AER effective date falls within the term.
- decreases during the already established term, the term will be adjusted accordingly.
- changes after the scheme is terminated or completed, no recalculation will occur.

A royalty recalculation will not go back into statute barred years.

5.0 NEW APPROVALS FOR EOR SCHEMES

5.1 Terms for new approvals, as per Section 5(2) of the Regulation.

New Approval		
T-Factor Range		Term (Months)
0.001	0.223	0
0.224	0.228	3
0.229	0.233	4
0.234	0.238	5
0.239	0.242	6
0.243	0.247	7
0.248	0.252	8
0.253	0.257	9
0.258	0.261	10
0.262	0.266	11
0.267	0.271	12
0.272	0.276	13
0.277	0.280	14
0.281	0.285	15
0.286	0.290	16
0.291	0.295	17
0.296	0.300	18
0.301	0.304	19
0.305	0.309	20
0.310	0.314	21
0.315	0.319	22
0.320	0.323	23
0.324	0.328	24
0.329	0.333	25
0.334	0.338	26
0.339	0.342	27
0.343	0.347	28
0.348	0.352	29
0.353	0.357	30
0.358	0.361	31

New Approval		
T-Factor Range		Term (Months)
0.362	0.366	32
0.367	0.371	33
0.372	0.376	34
0.377	0.380	35
0.381	0.385	36
0.386	0.390	37
0.391	0.395	38
0.396	0.400	39
0.401	0.404	40
0.405	0.409	41
0.410	0.414	42
0.415	0.419	43
0.420	0.423	44
0.424	0.428	45
0.429	0.433	46
0.434	0.438	47
0.439	0.442	48
0.443	0.447	49
0.448	0.452	50
0.453	0.457	51
0.458	0.461	52
0.462	0.466	53
0.467	0.471	54
0.472	0.476	55
0.477	0.480	56
0.481	0.485	57
0.486	0.490	58
0.491	0.495	59
0.496	0.500	60
0.501	0.504	61

New Approval		
T-Factor Range		Term (Months)
0.505	0.509	62
0.510	0.514	63
0.515	0.519	64
0.520	0.523	65
0.524	0.528	66
0.529	0.533	67
0.534	0.538	68
0.539	0.542	69
0.543	0.547	70
0.548	0.552	71
0.553	0.557	72
0.558	0.561	73
0.562	0.566	74
0.567	0.571	75
0.572	0.576	76
0.577	0.580	77
0.581	0.585	78
0.586	0.590	79
0.591	0.595	80
0.596	0.600	81
0.601	0.604	82
0.605	0.609	83
0.610	0.614	84
0.615	0.619	85
0.620	0.623	86
0.624	0.628	87
0.629	0.633	88
0.634	0.638	89
0.639	0.642	90
0.643	0.647	91

New Approval		
T-Factor Range		Term (Months)
0.648	0.652	92
0.653	0.657	93
0.658	0.661	94
0.662	0.666	95
0.667	0.671	96
0.672	0.676	97
0.677	0.680	98
0.681	0.685	99
0.686	0.690	100
0.691	0.695	101
0.696	0.700	102
0.701	0.704	103
0.705	0.709	104
0.710	0.714	105
0.715	0.719	106
0.720	0.723	107
0.724	0.728	108
0.729	0.733	109
0.734	0.738	110
0.739	0.742	111
0.743	0.747	112
0.748	0.752	113
0.753	0.757	114
0.758	0.761	115
0.762	0.766	116
0.767	0.771	117
0.772	0.776	118
0.777	0.780	119
0.781	1.000	120

6.0 CONTINUED APPROVAL FOR EOR SCHEMES

6.1 Terms for continued approvals, as per Section 7(2) of the Regulation.

<i>Continued Approval</i>		
<i>T-Factor Range</i>		<i>Term (Months)</i>
0.001	0.328	24
0.329	0.333	25
0.334	0.338	26
0.339	0.342	27
0.343	0.347	28
0.348	0.352	29
0.353	0.357	30
0.358	0.361	31
0.362	0.366	32
0.367	0.371	33
0.372	0.376	34
0.377	0.380	35
0.381	0.385	36
0.386	0.390	37
0.391	0.395	38
0.396	0.400	39
0.401	0.404	40
0.405	0.409	41
0.410	0.414	42
0.415	0.419	43
0.420	0.423	44
0.424	0.428	45
0.429	0.433	46
0.434	0.438	47

<i>Continued Approval</i>		
<i>T-Factor Range</i>		<i>Term (Months)</i>
0.439	0.442	48
0.443	0.447	49
0.448	0.452	50
0.453	0.457	51
0.458	0.461	52
0.462	0.466	53
0.467	0.471	54
0.472	0.476	55
0.477	0.480	56
0.481	0.485	57
0.486	0.490	58
0.491	0.495	59
0.496	0.500	60
0.501	0.504	61
0.505	0.509	62
0.510	0.514	63
0.515	0.519	64
0.520	0.523	65
0.524	0.528	66
0.529	0.533	67
0.534	0.538	68
0.539	0.542	69
0.543	0.547	70
0.548	0.552	71

<i>Continued Approval</i>		
<i>T-Factor Range</i>		<i>Term (Months)</i>
0.553	0.557	72
0.558	0.561	73
0.562	0.566	74
0.567	0.571	75
0.572	0.576	76
0.577	0.580	77
0.581	0.585	78
0.586	0.590	79
0.591	0.595	80
0.596	0.600	81
0.601	0.604	82
0.605	0.609	83
0.610	0.614	84
0.615	0.619	85
0.620	0.623	86
0.624	0.628	87
0.629	0.633	88
0.634	0.638	89
0.639	0.642	90
0.643	0.647	91
0.648	0.652	92
0.653	0.657	93
0.658	0.661	94
0.662	0.666	95

<i>Continued Approval</i>		
<i>T-Factor Range</i>		<i>Term (Months)</i>
0.667	0.671	96
0.672	0.676	97
0.677	0.680	98
0.681	0.685	99
0.686	0.690	100
0.691	0.695	101
0.696	0.700	102
0.701	0.704	103
0.705	0.709	104
0.710	0.714	105
0.715	0.719	106
0.720	0.723	107
0.724	0.728	108
0.729	0.733	109
0.734	0.738	110
0.739	0.742	111
0.743	0.747	112
0.748	0.752	113
0.753	0.757	114
0.758	0.761	115
0.762	0.766	116
0.767	0.771	117
0.772	0.776	118
0.777	0.780	119
0.781	1.000	120

7.0 OTHER ROYALTY RATES AND PROGRAMS

EORP may run concurrently with other royalty rates and programs.

7.1 Months and Caps

EORP is based on calendar months, while New Well Royalty Rate (NWRR) is based on production months. Non-producing months will not count towards the NWRR production month cap, but will count towards the EORP term. This will also apply to production months for Horizontal Oil New Well Royalty Rate (HONWRR), Horizontal Gas New Well Royalty Rate (HGNWRR), Coal Bed Methane New Well Royalty Rate (CBMNWRR) and Shale Gas New Well Royalty Rate (SGNWRR).

Counting production months vs. calendar months

Production	Months counted towards Cap / Term		
	NWRR	HONWRR	EORP
0	0	0	1
> 0	1	1	1

7.2 Program Qualifications

Oil well events qualifying for the Natural Gas Deep Drilling Program (NGDDP) may also qualify for EORP. If the well events qualify for both programs, they will run concurrently.

The Deep Oil Exploratory Program (DOEP) regulation does not allow for a well within 0.8 km of an EOR scheme boundary to qualify for DOEP.

8.0 TRANSITION RELIEF MULTIPLIER

A Transition Relief Multiplier (TRM) will be used in the royalty calculation for continued application approvals as per Section 7(1) of the Regulation.

For a continued application approval, the T-factor is the greater of 0.328 or the result of the following formula:

$$\text{T-factor} = \frac{\text{Incremental crude oil recoverable from the pool over the scheme life}}{\text{Remaining recoverable crude oil reserves at June 1, 1990}}$$

Example: Royalty Calculation Using TRM

The following example demonstrates how royalties will be calculated for transitioning schemes using the TRM at the well event level. The royalty rate is calculated according to the Alberta Royalty Framework (ARF).

- **If:**
 - Total Production = 100.0 m³
 - Crown Interest = 100.0000000 per cent
 - Par Price = \$485.88 / m³
 - Transition Relief Multiplier (TRM) = 0.62
- **Then:**
 - Royalty Payable
 - = (Total Production * Gross Royalty Rate) * Crown Interest
 - = (100.0 m³ * 21.23per cent) * 100per cent
 - = 21.2 m³
- **Then:**
 - Transition royalty volume (i.e. Net Royalty Volume)
 - = Gross Royalty Volume * TRM
 - = 21.23 m³ * 0.62
 - = **13.2 m³**

9.0 ISSUE RESOLUTION PROCESS

These guidelines describe existing EORP business practices. The operator may request further interpretation of any part of these guidelines as it applies to the administration of EORP.

Requests should be directed to:

Executive Director, Royalty Operations
Resource Revenue and Operations
Alberta Energy
7th Floor, North Petroleum Plaza
9945 - 108 Street
Edmonton, Alberta T5K 2G6

10.0 DISPUTE RESOLUTION

The operator of a scheme may dispute any decision made by Oil Royalty Operations based on the process described in Section 7.0 of the Regulation. However, disputes can only be heard prior to the production year becoming statute barred.

Notice should be directed to:

Director, Dispute Resolution
Legal Division
Alberta Energy
3rd Floor, AMEC Building
801 – 6th Avenue S.W.
Calgary, Alberta T2P 3W2

11.0 EOR REPORTING PROCEDURES

Alberta Energy may conduct periodic reviews of the scheme and ask for additional information. Alberta Energy will continue to attend AER annual scheme reviews and may ask for additional information at the reviews.

Additional information may include, but is not limited to:

- Cost vs. forecast (major cost variances from application/previous reports).
- Production vs. forecast.
- Injection vs. forecast.
- Operational updates for what has changed over the past year.
- Update on future plans, especially if they have changed significantly from the previous year.
- Synopsis of the scheme performance and whether or not the scheme is progressing as expected.

Failure to provide the information requested, may lead to the suspension or termination of the approval. If the scheme does not pass the review criteria, the approval may be terminated and/or the royalty rate for the well events may be recalculated.

Alberta Energy may request an annual presentation, if deemed necessary.

12.0 APPENDIX-ACRONYMS

AER – Alberta Energy Regulator
AFE – Authority For Expenditure
ASP – Alkali Surfactant Polymer
CBMNWRR – Coal Bed Methane New Well Royalty Rate
DOEP – Deep Oil Exploratory Program
EOR – Enhanced Oil Recovery
EORP – Enhanced Oil Recovery Program
EORRR – Enhanced Oil Recovery Royalty Reduction
GOR – Gas Oil Ratio
HCMF – Hydro Carbon Miscible Flood
HGNWRR – Horizontal Gas New Well Royalty Rate
HONWRR – Horizontal New Well Royalty Rate
NGDDP – Natural Gas Deep Drilling Program
NGL – Natural Gas Liquid
NWRR – New Well Royalty Rate
SGNWRR – Shale Gas New Well Royalty Rate
T-Factor – Tertiary Factor
TRM – Transition Relief Multiplier
WAG – Water Alternating Gas