

**FALL 2015**

**EXAM RETDAC**

**Design & Accounting  
Exam – Canada**

**CASE STUDY**

**RETDAC morning**



## **Canadian Exam Case Study - Course DA Retirement**

### **National Oil Company - Background**

National Oil Company (NOC) is a large well-established company that services oil wells all over the country of Gevrey. NOC has been in existence for over 30 years and has approximately 10,000 full-time salaried and union hourly employees and up to a further 5,000 non-skilled seasonal employees during the non-winter months. Approximately one-half of the seasonal employees return for another season. The full-time workforce is reasonably stable, but turnover in the last 5 years has been greater than desired, due to competitors recruiting NOC's employees.

Normally, an undergraduate degree is a minimum requirement to obtain entry to the salaried workforce and many employees have graduate degrees. About half of NOC's salaried employees are recruited directly from university with the other half coming from competitors.

The company's financial position varies with the price of oil. As oil prices rise, oil companies become increasingly active and in turn require the services of NOC. Conversely, activity slows as oil prices drop. Despite this, the company is usually in a taxable position.

NOC has managed to be successful by staying on the cutting edge of technology. NOC prides itself in being state of the art in processes and software relevant to its industry. This has helped it to stave off competition from both inside and outside of Gevrey. Although NOC is the largest player in the industry within Gevrey, there are larger players from outside of the country, with which NOC has to compete. From time to time, there are rumors of a takeover of NOC.

### **Country of Gevrey – Background**

Gevrey is a modern developed country with a simplified tax system. Both corporations and individuals are subject to income tax at a flat rate of 40%. Reasonable operating expenses, including contributions to Eligible Retirement Plans (ERPs), reduce taxable income.

No pension legislation exists apart from the rules outlined herein.

Rules that apply to gain ERP status are as follows:

## *General*

- if a company has one or more ERPs, then all employees are entitled to be in at least one of the company's ERPs.

## *Defined Benefit Plans (DB ERPs)*

- employer contributions may not exceed those recommended by an actuary, in accordance with generally accepted actuarial practice
- employer contributions are an eligible expense to reduce the employer's taxable income
- periodic pensions may not exceed \$3,000 per annum for each year of service regardless of form or commencement age
- periodic pensions cannot commence prior to age 55
- investment earnings generated by the ERP pension fund are not taxable
- pension payments are taxed as received in the hands of the recipient
- no employee contributions are permitted
- plan sponsors have unconditional rights to a refund of surplus assets

## *Defined Contribution Plans (DC ERPs)*

- employer contributions for any individual plan member cannot exceed \$20,000 annually
- employer contributions are an eligible expense to reduce the employer's taxable income
- investment earnings generated by the ERP pension fund are not taxable until withdrawn
- benefit distributions are taxed as received in the hands of the recipient
- employer contributions may or may not be dependent on employee contributions
- individuals may contribute up to \$20,000 annually
- such contributions are tax deductible to the individual

The tax assistance available under each of the above two arrangements does not depend on the extent of participation under the other one. For example, an individual could participate in a DC ERP and, if eligible under the plans' rules, also a DB ERP of his or her employer.

## *Supplemental Retirement Plans (SRPs)*

Contributions to a retirement plan that does not meet ERP status are not tax-deductible. Benefits paid to participants under such plans are tax deductible to the company and are taxable to participants, when paid to participants. Such a plan is known as a Supplemental Retirement Plan (SRP). An example of an SRP is a plan that restores the benefits lost by the imposition of the ERP maximums.

### *Retiree Health Care Plans*

Employers in Gevrey may provide health care benefits to retirees and their spouses through a separate plan which is not intended to qualify for ERP status. Benefits (including insurance premiums) paid under such plans are tax deductible to the company when paid on behalf of participants. Benefits payable as an indemnity for health related services are not taxable to plan participants at any time.

\* \* \*

No social security pension system exists in Gevrey and there are no state-provided life or health-care benefits.

For financial reporting purposes, Gevrey adopted International Financial Reporting Standards (IFRS). NOC applied the 10% corridor for actuarial gains and losses prior to January 1, 2013. Effective January 1, 2013, Gevrey has adopted IAS 19, rev. 2011.

The investment market in Gevrey is well developed, with substantial trading in government and corporate bonds and equities.

### **Summary of National Oil's Retirement Benefits**

NOC maintains three defined benefit plans:

1. a final-average pay defined benefit ERP for its full-time salaried employees;
2. a unit benefit defined benefit ERP for its full-time hourly union staff; and
3. a non-eligible pension plan (referred to as the SRP) for its executives that is supplemental to the salaried ERP.  
This plan has no assets.

In addition, the company has a defined contribution ERP for its seasonal workforce.

Furthermore, full-time salaried and union employees retiring with the company are covered for their lifetime by health

## Extracts of Retirement Benefits Provisions and Financial Information

### National Oil Full-Time Salaried Pension Plan

Eligibility	Immediate
Vesting	100% after 5 years of service
Normal Retirement Age	65
Early Retirement Age	55 with 5 years of service
Best Average Earnings	Average annual earnings during 60 consecutive months in which earnings were highest
Earnings	Base pay, excluding overtime and bonuses
Normal Retirement Benefit	2% of best average earnings times years of service, subject to tax system maximum  Benefit calculated as under the normal retirement benefit formula using best average earnings and service as of date of calculation
Early Retirement Benefit	Accrued benefit reduced by 0.25% per month that early retirement precedes age 62
Form of Benefit	If married, 50% joint & survivor benefit, without reduction. If not married, single life annuity
Optional Forms of Benefit	None
Indexing	None
Termination Benefit	Lump sum equal to actuarial present value of accrued benefit
Pre-Retirement Death Benefit	Lump sum equal to actuarial present value of accrued benefit payable to named beneficiary
Disability Benefit	None

**National Oil Full-Time Salaried Pension Plan**  
Historical Actuarial Valuation Results

2011 2012 2013 2014 2015

**Participant Summary - January 1**

<i>Active Participants</i>					
(a) count	3,930	3,792	3,615	3,550	3,280
(b) average age	49.0	49.4	49.8	48.5	48.3
(c) average service	19.2	19.6	19.8	18.5	18.3
(d) average future working lifetime	11.0	10.6	10.5	10.5	10.2
(e) average future working lifetime to vesting (for those not)	3.0	3.0	3.0	3.0	3.0
(f) average plan earnings (prior year)	80,000	83,000	84,000	86,900	89,800
<i>Deferred Vested Participants</i>					
(a) count	-	-	-	-	-
<i>Pensioners (incl beneficiaries)</i>					
(a) count	850	893	934	997	1,080
(b) average age	68.0	67.5	67.8	67.8	67.3
(c) average annual benefit	21,500	22,000	22,500	22,750	23,000
Duration of plan liabilities	16.2	16.2	15.3	14.4	14.3

**Plan Assets (numbers in \$000's) \***

<i>Change in Plan Assets during Prior Year:</i>					
Market Value of Assets at January 1 of prior year	1,007,158	1,087,057	1,176,401	1,259,896	1,350,820
Employer Contributions during prior year	42,348	42,698	43,336	42,391	41,182
Benefit Payments during prior year	(18,300)	(19,600)	(21,000)	(22,700)	(24,800)
Expenses during prior year	-	-	-	-	-
Investment return during prior year	55,851	66,246	61,160	71,233	80,861
Market Value of Assets at January 1 of current year	1,087,057	1,176,401	1,259,896	1,350,820	1,448,063
Rate of return during prior year	5%	6%	5%	6%	6%
<i>Average Portfolio Mix During Prior Year:</i>					
(a) Domestic Large Cap Equities	28%	27%	25%	30%	32%
(b) Domestic Small Cap Equities	20%	19%	18%	21%	22%
(c) Domestic Fixed Income	38%	40%	43%	35%	34%
(d) International Equities	7%	6%	5%	5%	4%
(e) Real Estate	4%	5%	4%	4%	3%
(f) Cash	3%	3%	5%	5%	5%
(g) Total	100%	100%	100%	100%	100%
Duration of Domestic Fixed Income	10.0	10.0	10.0	10.0	10.0
<i>Asset Class Returns during Prior Year:</i>					
(a) Domestic Large Cap Equities	3%	2%	3%	15%	7%
(b) Domestic Small Cap Equities	8%	7%	5%	18%	8%
(c) Domestic Fixed Income	8%	10%	8%	-9%	6%
(d) International Equities	2%	3%	1%	7%	-5%
(e) Real Estate	-5%	-1%	-1%	2%	2%
(f) Cash	2%	1%	1%	1%	1%

**National Oil Full-Time Salaried Pension Plan**  
Historical Actuarial Valuation Results

	2011	2012	2013	2014	2015
<b>Expense Valuation - January 1 (numbers in \$000's) *</b>					
<b>1. Funded Status and Deferred Costs:</b>					
(a) Defined Benefit Obligation (DBO)					
(i) Vested	(1,245,227)	(1,297,381)	(1,316,396)	(1,151,276)	(1,240,135)
(ii) Non-vested	(93,727)	(97,652)	(99,084)	(86,655)	(93,344)
(iii) Total	(1,338,954)	(1,395,033)	(1,415,480)	(1,237,931)	(1,333,479)
(b) Fair Value of Assets	1,087,057	1,176,401	1,259,896	1,350,820	1,448,063
(c) Funded Status: (a) + (b)	(251,897)	(218,633)	(155,583)	112,888	114,584
(d) Unamortized net actuarial(gain)/loss	128,923	81,506	N/A	N/A	N/A
<b>2. Defined Benefit Cost</b>					
(a) Service Cost (beg. of year)	61,486	62,404	65,484	57,342	62,543
(b) Interest Cost (net)	69,564	72,382	8,994	(3,807)	(2,863)
(c) Expected return on assets	(74,200)	(80,208)	N/A	N/A	N/A
(d) Amortization of past service cost	-	-	N/A	N/A	N/A
(e) Amortization of net actuarial (gain)/loss **	-	-	N/A	N/A	N/A
(f) Total Defined Benefit Cost	56,851	54,578	74,479	53,535	59,680
All plan administrative expenses are paid and accounted for outside of the plan fund.					
<b>3. Actuarial Basis and Supplemental Data</b>					
(a) Discount rate	5.00%	5.00%	4.50%	5.00%	4.00%
(b) Return on assets	6.75%	6.75%	N/A	N/A	N/A
(c) Salary scale	4.00%	4.00%	3.50%	3.50%	3.50%
(d) Consumer Price Index	3.00%	3.00%	3.00%	3.00%	3.00%
(e) Mortality			GAM83		
(f) Turnover			Based on NOC experience for 1986-1988		
(g) Proportion married and age difference			80% married; male spouses 3 years older than female spouses		
(h) Retirement age			Age 62		
(i) Expenses			Assume all expenses paid by company		
(j) Asset Valuation Method			Market value of assets		
(k) Actuarial Cost Method			Projected unit credit		
(l) Employer contributions	42,698	43,336	42,391	41,182	39,050
(m) Expected Benefit payments	(18,300)	(19,600)	(21,000)	(22,700)	(24,800)

\* numbers may not add due to rounding

\*\* gains/losses exceeding 10% of the greater of the Defined Benefit Obligation and the Fair Value of Assets are amortized over the average future working lifetime of active participants prior to January 1, 2013

**National Oil Full-Time Salaried Pension Plan  
Reconciliation of Plan Participants (2011 - 2015)**

	<u>Active</u>	<u>Pensioners/ Beneficiaries</u>	<u>Total</u>
<b>1. Participants as of January 1, 2011</b>	<b>3,930</b>	<b>850</b>	<b>4,780</b>
- New Entrants/Rehires	135	-	135
- Terminated Nonvested	(90)	-	(90)
- Terminated Vested (Lump Sum Cashout)	(140)	-	(140)
- Retirement	(42)	42	-
- Death w/ Beneficiary	(1)	1	-
- Death w/o Beneficiary	-	-	-
- Net change	(138)	43	(95)
<b>2. Participants as of January 1, 2012</b>	<b>3,792</b>	<b>893</b>	<b>4,685</b>
- New Entrants/Rehires	54	-	54
- Terminated Nonvested	(60)	-	(60)
- Terminated Vested (Lump Sum Cashout)	(130)	-	(130)
- Retirement	(40)	40	-
- Death w/ Beneficiary	(1)	1	-
- Death w/o Beneficiary	-	-	-
- Net change	(177)	41	(136)
<b>3. Participants as of January 1, 2013</b>	<b>3,615</b>	<b>934</b>	<b>4,549</b>
- New Entrants/Rehires	200	-	200
- Terminated Nonvested	(80)	-	(80)
- Terminated Vested (Lump Sum Cashout)	(120)	-	(120)
- Retirement	(60)	60	-
- Death w/ Beneficiary	(3)	3	-
- Death w/o Beneficiary	(2)	-	(2)
- Net change	(65)	63	(2)
<b>4. Participants as of January 1, 2014</b>	<b>3,550</b>	<b>997</b>	<b>4,547</b>
- New Entrants/Rehires	45	-	45
- Terminated Nonvested	(30)	-	(30)
- Terminated Vested (Lump Sum Cashout)	(200)	-	(200)
- Retirement	(80)	80	-
- Death w/ Beneficiary	(3)	3	-
- Death w/o Beneficiary	(2)	-	(2)
- Net change	(270)	83	(187)
<b>5. Participants as of January 1, 2015</b>	<b>3,280</b>	<b>1,080</b>	<b>4,360</b>

**National Oil Full-Time Salaried Pension Plan  
Age/Svc/Earnings as of January 1, 2015**

Age (Years)	# Participants	Average Salary	Service (Years)					Totals
			< 5	5-10	10-15	15-20	>20	
< 25	20	60,000	20	65,000	-	-	-	40
25-35	100	70,000	40	75,000	110	70,000	-	360
35-45	70	80,000	60	85,000	200	90,000	150	580
45-55	80	80,000	50	90,000	150	95,000	720	1,300
55-65	10	80,000	60	85,000	80	90,000	560	930
> 65	-	-	-	-	50	70,000	80,000	70
Totals	280	75,000	230	82,600	590	88,800	1,430	3,280
								89,800

National Oil Full-Time Salaried Supplemental Retirement Plan (SRP)

Eligibility	Immediate
Normal Retirement Age	65
Early Retirement Age	55 with 5 years of service
Accrued Benefit	Accrued Benefit calculated under the provisions of the Salaried Pension Plan without regard to tax system maximums <u>less</u> actual Accrued Benefit under the Salaried Pension Plan
Normal Retirement Benefit	Accrued Benefit
Early Retirement Benefit	Accrued Benefit reduced by 0.25% per month that early retirement precedes age 62
Commencement Date and Form of Benefit	Must be same as under Salaried Pension Plan
Indexing	None
Termination Benefit	None
Pre-Retirement Death Benefit	None
Disability Benefit	None

Supplemental Retirement Plan  
 Historical Valuation Results - January 1

2011                      2012                      2013                      2014                      2015

**Participant Summary**

<b>1. Active Participants</b>					
(a) count	57	59	57	53	50
(b) average age	55.2	55.7	56.0	56.5	57.0
(c) average service	19.7	20.2	20.5	20.8	21.0
(d) average future working lifetime	5.5	5.3	5.1	5.0	4.8
(e) average future working lifetime to vesting (for those not)	2.0	2.0	2.0	2.0	2.0
(f) average plan earnings (prior year)	370,000	400,000	410,000	430,000	450,000
<b>2. Deferred Vested Participants</b>					
(a) count	-	-	-	-	-
<b>3. Pensioners (incl beneficiaries)</b>					
(a) count	25	28	30	32	35
(b) average age	66.5	67.0	67.3	67.0	66.8
(c) average annual benefit	15,800	16,000	16,500	16,600	16,800
Duration of plan liabilities	15.5	15.5	15.3	15.0	14.5

**Expense Valuation Results (numbers in \$000's) \***

<b>1. Funded Status and Deferred Costs:</b>					
(a) Defined Benefit Obligation (DBO)					
(i) Vested	(41,942)	(42,998)	(50,281)	(54,934)	(64,801)
(ii) Non-vested	(13,981)	(14,333)	(16,760)	(18,311)	(21,600)
(iii) Total	(55,923)	(57,330)	(67,041)	(73,245)	(86,401)
(b) Fair Value of Assets	-	-	-	-	-
(c) Funded Status: (a) + (b)	(55,923)	(57,330)	(67,041)	(73,245)	(86,401)
(d) Unamortized net actuarial (gain)/loss	11,293	7,704	N/A	N/A	N/A
<b>2. Defined Benefit Cost</b>					
(a) Service cost (beg. of year)	1,494	1,655	1,736	1,739	1,901
(b) Interest Cost (net)	2,861	2,938	3,084	3,549	3,520
(c) Expected ROA	-	-	N/A	N/A	N/A
(d) Amort of past service cost	-	-	N/A	N/A	N/A
(e) Amort of unrec (gain)/loss **	1,036	372	N/A	N/A	N/A
(f) Total Defined Benefit Cost	5,392	4,965	4,820	5,288	5,421
All plan administrative expenses are paid out of general assets of NOC (outside of plan accounting).					
<b>3. Expected Benefit Payments</b>	395	448	495	531	588
<b>4. Actuarial Basis</b>					
(a) Discount rate	5.00%	5.00%	4.50%	4.75%	4.00%
(b) Return on assets	N/A	N/A	N/A	N/A	N/A
(c) Salary scale	3.50%	3.50%	3.50%	3.50%	3.50%
(d) CPI	3.00%	3.00%	3.00%	3.00%	3.00%
(e) All other assumptions	Same as for Full-time Salaried Pension Plan				

\* numbers may not add due to rounding

\*\* gains/losses exceeding 10% of the greater of the Defined Benefit Obligation and the Fair Value of Assets are amortized over the average future working lifetime of active participants prior to January 1, 2013

## National Oil Full-Time Hourly Union Pension Plan

Eligibility	Immediate
Vesting	100% after 5 years of service
Normal Retirement Age	65
Early Retirement Age	55 with 10 years of service
Normal Retirement Benefit	\$80 per month times years of service for terminations/ retirements prior to 2010  \$81 per month times years of service for terminations/ retirements during 2010 and beyond
Accrued Benefit	Benefit calculated as under the normal retirement benefit formula based on service and multiplier as of date of calculation.
Early Retirement Benefit	Unreduced benefit at 62 with 30 years of service, otherwise reduced by 0.25% per month that early retirement precedes Normal Retirement Age.
Form of Benefit	If married, 50% joint & survivor benefit without reduction  If not married, single life annuity.
Optional Forms of Benefit	None
Post-Retirement Indexing	Lesser of 1% or CPI each year after pension commencement
Termination Benefit	Lump sum equal to actuarial present value of accrued benefit assuming no indexing
Pre-Retirement Death Benefit	Lump sum equal to actuarial present value of accrued benefit assuming no indexing, payable to named beneficiary
Disability Benefit	None

**National Oil Full-Time Hourly Union Pension Plan**  
Historical Actuarial Valuation Results

	2011	2012	2013	2014	2015
<b>Participant Summary - January 1</b>					
<i>Active Participants</i>					
(a) count	6,262	6,272	6,220	6,135	5,930
(b) average age	50.0	50.8	50.8	50.0	50.0
(c) average service	20.4	21.0	21.0	21.0	20.5
(d) average future working lifetime	10.1	9.9	9.5	10.0	9.8
(e) average future working lifetime to vesting (for those not)	3.3	3.2	3.2	3.3	3.0
(f) average plan earnings (prior year)	44,000	45,000	44,900	49,000	-
<i>Deferred Vested Participants</i>					
(a) count	-	-	-	-	-
<i>Pensioners (incl beneficiaries)</i>					
(a) count	1,153	1,173	1,205	1,237	1,299
(b) average age	72.2	72.4	72.7	72.0	71.0
(c) average annual benefit	11,600	11,700	11,700	11,500	11,750
Duration of plan liabilities	14.1	14.2	14.1	14.1	14.0

**Plan Assets (numbers in \$000's) \***

<i>Change in Plan Assets during Prior Year:</i>					
Market Value of Assets at January 1 of prior year	678,008	757,355	856,462	948,889	902,747
Employer Contributions during prior year	40,000	40,000	40,000	40,000	50,000
Benefit Payments during prior year	(13,000)	(14,000)	(14,000)	(14,000)	(15,000)
Expenses during prior year	-	-	-	-	-
Investment return during prior year	52,347	73,107	66,427	(72,142)	54,479
Market Value of Assets at January 1 of current year	757,355	856,462	948,889	902,747	992,226
Rate of return during prior year	8%	9%	8%	-8%	6%
<i>Average Portfolio Mix During Prior Year:</i>					
(a) Domestic Large Cap Equities	5%	3%	3%	5%	7%
(b) Domestic Small Cap Equities	0%	0%	0%	0%	0%
(c) Domestic Fixed Income	92%	94%	94%	92%	90%
(d) International Equities	0%	0%	0%	0%	0%
(e) Real Estate	0%	0%	0%	0%	0%
(f) Cash	3%	3%	3%	3%	3%
(g) Total	100%	100%	100%	100%	100%
Duration of Domestic Fixed Income	15.0	15.0	15.0	15.0	15.0
<i>Asset Class Returns during Prior Year:</i>					
(a) Domestic Large Cap Equities	3%	2%	3%	15%	7%
(b) Domestic Small Cap Equities	8%	7%	5%	18%	8%
(c) Domestic Fixed Income	8%	10%	8%	-9%	6%
(d) International Equities	2%	3%	1%	7%	-5%
(e) Real Estate	-5%	-1%	-1%	2%	2%
(f) Cash	2%	1%	1%	1%	1%

\* numbers may not add due to rounding

**National Oil Full-Time Hourly Union Pension Plan**  
Historical Actuarial Valuation Results

	2011	2012	2013	2014	2015
<b>1. Funded Status and Deferred Costs:</b>					
(active multiplier)	\$ 81	\$ 81	\$ 81	\$ 81	\$ 81
(a) Defined Benefit Obligation (DBO)					
(i) Vested	(907,401)	(971,977)	(969,479)	(866,506)	(947,147)
(ii) Non-vested	(47,758)	(51,157)	(51,025)	(45,606)	(49,850)
(iii) Total	(955,159)	(1,023,134)	(1,020,505)	(912,112)	(996,997)
(b) Fair Value of Assets	757,355	856,462	948,889	902,747	992,226
(c) Funded Status: (a) + (b)	(197,803)	(166,672)	(71,616)	(9,365)	(4,772)
(d) Unamortized past service costs	123	72	N/A	N/A	N/A
(e) Unamortized net actuarial (gain)/loss	140,348	99,694	N/A	N/A	N/A
<b>2. Defined Benefit Cost</b>					
(a) Service Cost (beg. of year)	39,977	41,951	41,604	36,055	41,124
(b) Interest Cost (net)	49,432	52,904	4,661	1,123	940
(c) Expected return on assets	(44,324)	(49,994)	N/A	N/A	N/A
(d) Amortization of past service cost	51	51	N/A	N/A	N/A
(e) Amortization of net actuarial (gain)/loss **	4,439	-	N/A	N/A	N/A
(f) Immediate recognition of past service costs & (gains)/losses ***	-	-	-	-	-
(g) Total Defined Benefit Cost	49,575	44,913	46,265	37,178	42,064
All plan administrative expenses are paid and accounted for outside of the plan fund.					
<b>3. Actuarial Basis and Supplemental Data</b>					
(a) Discount rate	5.00%	5.00%	5.00%	5.50%	4.50%
(b) Return on assets	5.75%	5.75%	N/A	N/A	N/A
(c) Salary scale	N/A	N/A	N/A	N/A	N/A
(d) Consumer Price Index	3.00%	3.00%	3.00%	3.00%	3.00%
(e) Mortality					
(f) Turnover					
(g) Retirement age					
(h) Proportion married and age difference					
(i) Expenses					
(j) Post-retirement indexing	1.00%	1.00%	1.00%	1.00%	1.00%
(k) Asset Valuation Method					
(l) Actuarial Cost Method					
(m) Employer contributions	40,000	40,000	40,000	50,000	50,000
(n) Expected Benefit payments	(13,000)	(14,000)	(14,000)	(14,000)	(15,000)

\* numbers may not add due to rounding

\*\* gains/losses exceeding 10% of the greater of the Defined Benefit Obligation and the Fair Value of Assets are amortized over the average future working lifetime of active participants prior to January 1, 2013

\*\*\* A plan change was recognized January 1, 2010 increasing the benefit obligation \$8,722 million (\$174,000 was for non-vested and \$8,548 million was vested).

**National Oil Full-Time Hourly Union Pension Plan  
Reconciliation of Plan Participants (2011 - 2015)**

	<u>Active</u>	<u>Pensioners/ Beneficiaries</u>	<u>Total</u>
<b>1. Participants as of January 1, 2011</b>	<b>6,262</b>	<b>1,153</b>	<b>7,415</b>
- New Entrants/Rehires	130	-	130
- Terminated Nonvested	(40)	-	(40)
- Terminated Vested (Lump Sum Cashout)	(60)	-	(60)
- Retirement	(20)	20	-
- Death w/ Beneficiary	-	-	-
- Death w/o Beneficiary	-	-	-
- Net change	10	20	30
<b>2. Participants as of January 1, 2012</b>	<b>6,272</b>	<b>1,173</b>	<b>7,445</b>
- New Entrants/Rehires	100	-	100
- Terminated Nonvested	(50)	-	(50)
- Terminated Vested (Lump Sum Cashout)	(70)	-	(70)
- Retirement	(30)	30	-
- Death w/ Beneficiary	(1)	1	-
- Death w/o Beneficiary	(1)	1	-
- Net change	(52)	32	(20)
<b>3. Participants as of January 1, 2013</b>	<b>6,220</b>	<b>1,205</b>	<b>7,425</b>
- New Entrants/Rehires	150	-	150
- Terminated Nonvested	(80)	-	(80)
- Terminated Vested (Lump Sum Cashout)	(100)	-	(100)
- Retirement	(50)	30	(20)
- Death w/ Beneficiary	(2)	2	-
- Death w/o Beneficiary	(3)	-	(3)
- Net change	(85)	32	(53)
<b>4. Participants as of January 1, 2014</b>	<b>6,135</b>	<b>1,237</b>	<b>7,372</b>
- New Entrants/Rehires	10	-	10
- Terminated Nonvested	(70)	-	(70)
- Terminated Vested (Lump Sum Cashout)	(80)	-	(80)
- Retirement	(60)	60	-
- Death w/ Beneficiary	(2)	2	-
- Death w/o Beneficiary	(3)	-	(3)
- Net change	(205)	62	(143)
<b>5. Participants as of January 1, 2014</b>	<b>5,930</b>	<b>1,299</b>	<b>7,229</b>

**National Oil Full-Time Hourly Union Pension Plan  
Age/Svc/Earnings as of January 1, 2015**

Age (Years)	# Participants	Service (Years)					Totals
		< 5	5-10	10-15	15-20	>20	
< 25	Average Salary	35,000	40,000	50	-	-	100
25-35	Average Salary	30,000	40,000	40	100	-	240
35-45	Average Salary	30,000	35,000	130	100	700	1,680
45-55	Average Salary	40,000	45,000	50	100	400	1,900
55-65	Average Salary	35,000	36,000	50	100	200	1,600
> 65	Average Salary	-	30,000	10	100	100	410
Totals	Average Salary	33,300	37,900	330	500	1,400	5,930
	Avg Age	50.0					
	Avg Svc	20.5					
	Avg Salary	49,000					

National Oil Part-Time DC Pension Plan

Eligibility	Immediate
Vesting	Immediate
Employee Contributions	Employee may defer between 1% to 20% of pay
Employer Contributions	3% of pay
Plan Fund Investment Options	The employer invests in funds elected by employee
Account Balance	Contributions are accumulated in member's individual account earning a rate of return based on the investments elected by the employee
Loans/Withdrawals	Not permitted.
Benefit on Termination or Retirement	Account balance is payable to employee upon termination or retirement. Employee has the option to leave the balance in the fund or withdraw entire balance immediately upon termination or retirement.
Benefit on Death	Account balance is payable to named beneficiary

**National Oil Part-Time DC Pension Plan**  
Historical Results - January 1

2011                      2012                      2013                      2014                      2015

**Participant Summary**

(a) number participating during prior year	6,300	6,500	6,700	6,900	7,100
(b) average age	28.8	28.0	28.0	27.0	29.0
(c) average pay	33,000	34,000	36,000	37,000	39,000

**Plan Assets (numbers in \$000's) \***

<i>Change in Plan Assets during Prior Year:</i>					
Market Value of Assets at January 1 of prior year	74,104	81,296	87,825	97,573	109,540
Employee Contributions during prior year	10,395	11,050	12,060	12,765	13,845
Company Contributions during prior year	6,237	6,630	7,236	7,659	8,307
Benefit Payments during prior year	(13,230)	(13,650)	(14,070)	(14,490)	(14,910)
Expenses during prior year	-	-	-	-	-
Investment return during prior year	3,790	2,499	4,522	6,032	5,658
Market Value of Assets at January 1 of current year	81,296	87,825	97,573	109,540	122,440
Rate of return during prior year	5%	3%	5%	6%	5%

\* numbers may not add due to rounding

National Oil Full-Time Salaried and Union Retiree Health Benefit Program

Eligibility	Immediate
Earliest Retirement Age	55 and 10 years of service
Retirement benefit	Retirees and their spouses may elect to participate in a self insured health plan, with 100% the of cost of the plan paid by the employer.
Pre-retirement / termination benefits	None
Spousal Coverage	Coverage continues for the life of the spouse after death of an eligible employee
Benefits Covered	\$0 deductible; \$0 copay No lifetime maximum Office visits Hospital visits Surgery Prescription drugs
Life Insurance benefit	Effective January 1, 2010: introduced \$50,000 life insurance benefit payable upon death after retirement

Retiree Health and Welfare Program  
Historical Valuation Results

	2011	2012	2013	2014	2015
<b>Expense Valuation Results - January 1 (numbers in \$000's) *</b>					
<b>1. Funded Status and Deferred Costs:</b>					
(a) Defined Benefit Obligation (DBO)					
(i) actives - fully vested	(806,700)	(924,061)	(1,032,703)	(1,031,105)	(1,218,466)
(ii) actives - not fully vested	(345,728)	(396,026)	(442,587)	(441,902)	(522,200)
(iii) retirees	(848,530)	(960,883)	(1,069,370)	(1,102,404)	(1,387,852)
(iv) total	(2,000,958)	(2,280,970)	(2,544,660)	(2,575,411)	(3,128,517)
(b) Fair Value of Assets	0	0	0	0	0
(c) Surplus: (a) + (b)	(2,000,958)	(2,280,970)	(2,544,660)	(2,575,411)	(3,128,517)
(d) Unrecognized past service costs	17,318	14,636	N/A	N/A	N/A
(e) Unrecognized (gain)/loss	365,754	492,158	N/A	N/A	N/A
<b>2. Defined Benefit Cost</b>					
(a) Service cost (beg. of year)	72,027	82,505	92,206	92,063	108,792
(b) Interest Cost (net)	102,724	117,124	117,579	125,446	120,274
(c) Expected ROA	0	0	N/A	N/A	N/A
(d) Amort of past service cost	2,682	2,682	N/A	N/A	N/A
(e) Amort of unrec (gain)/loss **	15,857	25,981	N/A	N/A	N/A
(f) Total Defined Benefit Cost	193,290	228,292	209,785	217,509	229,066
All plan administrative and claims expenses are included in the claims costs used to determine the plan liability.					
3. Expected Benefit Payments	37,000	42,000	48,000	53,000	60,000
4. Average Future Working Lifetime to Retirement	10.45	10.16	9.87	10.18	9.94
5. Average Future Working Lifetime to FEA	7.45	7.16	6.87	7.18	6.94
6. Average Future Working Lifetime to Fully Vested (for those not vested)	7.45	7.16	6.87	7.18	6.94
7. Duration of plan liabilities	12.0	12.0	12.0	12.0	12.0
<b>8. Actuarial Assumptions:</b>					
(a) Discount rate	5.00%	5.00%	4.50%	4.75%	3.75%
(b) Return on assets	N/A	N/A	N/A	N/A	N/A
(c) Medical trend					
Initial rate	5.50%	6.00%	6.00%	5.50%	6.00%
Annual decrease	0.50%	0.50%	0.50%	0.50%	0.50%
Ultimate rate	4.50%	5.00%	5.00%	4.50%	4.50%
Year ultimate trend rate reached	2013	2014	2015	2015	2018
(d) CPI	3.00%	3.00%	3.00%	3.00%	3.00%
(e) Per capita claims cost	13,000	14,500	15,500	16,500	18,000
(f) Retirement assumption	Age 62 with 10 years of service				
(g) All other demographic assumptions	Same as those used for pension plans				

\* numbers may not add due to rounding

\*\* gains/losses exceeding 10% of the Defined Benefit Obligation are amortized over the average future working lifetime of active participants prior to January 1, 2013